2014-1167

In The

United States Court Of Appeals

For The Federal Circuit

INFO-HOLD, INC.,

Plaintiff-Appellant,

v.

MUZAK LLC,

Defendant-Appellee.

Appeal from the United States District Court for the Southern District of Ohio in case no. 11-cv-00283, Judge Timothy S. Black.

NON-CONFIDENTIAL BRIEF OF APPELLANT

James L. Kwak
STANDLEY LAW GROUP LLP
6300 Riverside Dr.
Dublin, OH 43017
(614) 792-5555

Counsel for Appellant

Daniel J. Wood
INFO-HOLD, INC.
4120 Airport Rd.
Cincinnati, OH 45226
(513) 248-5600

Counsel for Appellant

FORM 9. Certificate of Interest

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

INFO-HOLD, INC. v. MUZAK LLC

No. 2014-1167

CERTIFICATE OF INTEREST

Counsel for the (petitioner) (appellant) (respondent) (appellee) (amicus) (name of party) Appellant certifies the following (use "None" if applicable; use extra sheets if necessary):

1. The full name of every party or amicus represented by me is:

Info-Hold, Inc.

2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me is:

None.

3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party or amicus curiae represented by me are:

None.

4. ☑ The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this court are:

James L. Kwak and Melissa A. Rogers, Standley Law Group LLP, 6300 Riverside Drive, Dublin, Ohio 43017 and Daniel Wood, Info-Hold, Inc., 4120 Airport Road, Cincinnati, Ohio 45226

1/2/2014
Date

/s/ James L. Kwak
Signature of counsel

James L. Kwak
Printed name of counsel

Please Note: All questions must be answered
cc: Counsel for Appellee, Muzak LLC

Reset Fields

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CONFIDENTIAL MATERIAL OMITTED

The material omitted on page 19 indicates a percentage royalty rate contained in the confidential license agreement, the material omitted at page 32 states the royalty rate Muzak charges its franchisees and the material omitted at pages 32 through 60 of the Addendum are the Opinion and Order Granting Defendants' Motion for Partial Summary Judgment Limiting Damages to Those Accrued After May 3, 2011 and the Opinion and Order Granting Defendants' Motion for Partial Summary Judgment on Plaintiff's Claims of Induced Infringement and Dismissing Muzak Holdings LLC filed under seal by the District Court.

TABLE OF AUTHORITIES

CASES Page(s)

TABLE OF ABBREVIATIONS

A____	Cited page(s) of the Joint Appendix
Info-Hold	Info-Hold, Inc. (Appellant-Plaintiff)
Muzak	Muzak LLC and Muzak Holdings LLC (Appellee-Defendant)
AMTC	Applied Media Technologies Corporation
’374 Patent	U.S. Patent No. 5,991,374, Programmable Messaging System for Controlling Playback of Messages on Remote Music On-Hold Compatible Telephone Systems and Other Message Output Devices including Reexamination Certificate (U.S. 5,991,374 C1)
MOH	Music on-hold

STATEMENT OF RELATED CASES

On November 14, 2008, Info-Hold filed a complaint in the Southern District of Ohio Western Division alleging that AMTC was infringing the ’374 Patent. *Info-Hold, Inc. v. Applied Media Technologies,* Civ. No. 1:08-cv-802 at Dkt. No. 1. That case was assigned to Judge Timothy S. Black.

On April 25, 2013, Judge Black issued an Order on Claim Construction that construed several terms of the ’374 Patent. The Court applied the exact same definition to the term “when a caller is placed on hold” as was applied by Judge Black in this case. As a result of the claim construction Order, Info-Hold stipulated to a final judgment that AMTC did not infringe any asserted claims of the ’374 Patent. The Court entered a final judgment on June 17, 2013 and Info-Hold timely filed a notice of Appeal. The Court is currently considering Info-Hold’s appeal of the District Court’s Order on Claim Construction. *Info-Hold, Inc. v. Applied Media Technologies Corporation*, No. 13-1528 (Fed. Cir. filed July 24, 2013). Muzak has filed a brief Amicus Curiae in that case seeking affirmance of the District Court’s decision and asserting its position regarding the construction of the term “when a caller is placed on hold.”

I. STATEMENT OF JURISDICTION

The District Court had jurisdiction under 28 U.S.C. §§ 1331 and 1338(a) and entered final judgment on November 13, 2013. This timely appeal was filed on December 13, 2013. 28 U.S.C. § 2107(a). The Court has jurisdiction under 28 U.S.C. § 1295(a)(1).

II. STATEMENT OF THE ISSUES

Info-Hold filed this case seeking relief from patent infringement that was being committed by two of its largest competitors[1], but the case was ended at the summary judgment stage when the District Court decided it could not go forward.[2] The District Court's decision was based, not upon a finding of non-infringement or invalidity, but rather upon a finding that Info-Hold did not present "evidence to make out even a *prima facie* case of reasonable royalty damages."[3] The Court had previously decided on summary judgment that Info-Hold was not entitled to injunctive relief,[4] was not entitled to lost profits as a measure of damages,[5] and was not entitled to damages prior to the date on which Info-Hold filed this suit.[6] This appeal presents the following issues:

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[1] *See* A1053-1059
[2] A100
[3] A78-90
[4] A61-62
[5] A63-69
[6] A32-49

A. Did the District Court Commit Error by Dismissing this Case on Summary Judgment based on a Purported Lack of Evidence Pertaining to Reasonable Royalty Damages:

1. Does 35 U.S.C. § 284 permit for a Court to find on summary judgment that a patentee does not have sufficient evidence from which to determine a reasonable royalty rate for the infringement of its patent?

2. Did the District Court commit error in this case by finding on summary judgment that Info-Hold did not have sufficient evidence of reasonable royalty damages by:

   a) giving no consideration to, amongst other things, a license to the patent-in-suit, an assignment of the patent-in-suit, and the opinion of Muzak's expert witness on the reasonable royalty issue all of which were of record and cited by Info-Hold in opposing summary judgment; and

   b) improperly concluding that Info-Hold did not have witnesses to offer testimony on reasonable royalty damages and failing to recognize that even in such a situation Info-Hold could present relevant evidence through Muzak's witnesses and through documents?

3. Did the District Court abuse its discretion in striking the reports and testimony of Robert L. White, CPA, Info-Hold's expert on damages, when the facts establish that he properly applied the *Georgia-Pacific* factors to the facts of this case in determining a reasonable royalty?

B. Did the District Court Incorrectly Construe the Claim term "When a Caller is Placed on Hold?"

C. Did the District Court Incorrectly Find that the Evidence of Record Cannot Establish that the Defendants had Knowledge they were Inducing Others to Infringe the Asserted Patent when the Facts Show that Info-Hold Notified the Defendants of its Patent in 2006, Explained

to the Defendants what the Patent Claimed, and Defendants failed to Perform an Infringement Analysis after Stating they would?

III. STATEMENT OF THE CASE

Info-Hold, as owner of the ’374 Patent, filed this patent infringement action against Muzak Holdings, LLC and Muzak LLC on May 3, 2011 alleging the Defendants had infringed and were infringing the patent-in-suit through their manufacture and sale of two playback messaging systems referred to by the Defendants as the “Encompass LE 2” and the “Encompass MV.”[7] Info-Hold’s claims against the Defendants included allegations that they were guilty of inducing and contributing to the infringement of the ’374 Patent.[8] The Defendants answered Info-Hold’s complaint, seeking, amongst other things a declaratory judgment of invalidity and non-infringement of the ’374 Patent.[9]

In its Order on Claim Construction, the District Court construed certain terms of the ’374 Patent including the term “when a caller is placed on hold.” That term was construed by the Court to mean “at the moment a caller is placed on hold.”[10] In light of that construction, Info-Hold stipulated to a judgment of non-

[7] A1053-1059
[8] A1055; A1057
[9] A1062-1073
[10] A6-8

infringement of claims 7 – 11, 14 – 18, 20 – 22, 26 – 29, 37 and 38 of the '374 Patent.[11]

The Defendants subsequently filed numerous Motions for Summary Judgment with the District Court. Relevant to this Appeal are the Defendants': 1) Motion for Partial Summary Judgment of Info-Hold's Claims of Inducement of Infringement against Muzak Holdings LLC and Muzak LLC and Dismissing Muzak Holdings LLC From the Case;[12] 2) Motion for Partial Summary Judgment that Plaintiff Info-Hold is not Entitled to Lost Profits Damages;[13] and 3) Motion for Partial Summary Judgment that Info-Hold is not Entitled to Reasonable Royalty Damages and for Dismissal,[14] which were all granted. Muzak also filed a Motion for Summary Judgment that Info-Hold was not entitled to Injunctive Relief, which was not opposed by Info-Hold and was granted by the Court.[15] Muzak's Motion for Partial Summary Judgment that Info-Hold is not Entitled to Reasonable Royalty Damages was filed in conjunction with a Motion to Strike the Expert

[11] A23-25
[12] A2515
[13] A3328
[14] A3775. Because Muzak Holdings LLC had been dismissed from the case prior to its filing, this Motion was filed by Muzak LLC and not both Defendants
[15] *See* A61-62

Reports and Testimony of Info-Hold's Expert on Damages, Robert L. White,[16] which was also granted by the District Court.[17]

Muzak LLC also filed with the Court a Motion for Summary Judgment of Non-Infringement and a Motion for Partial Summary Judgment that Claims 3, 6, and 24 of the '374 Patent are Invalid as Anticipated or in the Alternative that all Asserted Claims are Invalid for Lack of Enablement.[18] Info-Hold also filed a motion for summary judgment on the issue of infringement.[19] The District Court never ruled on the infringement and validity questions raised in these motions. Instead, the District Court dismissed the case with prejudice on November 13, 2013 based on its conclusion that Info-Hold had "not demonstrated that it is entitled to any measurable remedy" in this case, including a reasonable royalty.[20] Accordingly, the District Court rendered a final judgment based on its summary judgment findings that there was no evidence of damages even though there were infringement and validity issues relating to claims of the '374 Patent still remaining in the case.[21] Info-Hold filed its notice of appeal with the District Court on December 13, 2013.

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[16] A3810
[17] A78-90
[18] *See* A1045-1046 at Docket Entries 161 and 165
[19] Info-Hold's Motion for Summary Judgment of Infringement Filed Under Seal on April 29, 2013
[20] *See* A98-99
[21] A100

Statement of the Facts

A. Info-Hold's Contributions to the Playback Messaging Industry and the '374 Patent

Many businesses use music on-hold ("MOH") compatible telephone systems to provide a customer with music or audio promotions of products or services while the customer is placed on hold and waiting for assistance.[22] At least as early as August 8, 1996, Joey C. Hazenfield, Info-Hold's CFO, recognized a need in the art for improved systems and methods that would provide for the more effective maintenance of a promotional program for customers placed on hold or in the broadcast area of a public access system.[23] Mr. Hazenfield's solution to this problem, is encompassed by the claims of the '374 Patent.[24] The claims are generally directed to systems and methods for the remote control of on-hold, overhead, and other message playback devices located at one or more remote locations.[25] The output of the message playback devices can be connected to a public address system so that customers at the store location can hear selected messages as they walk through the store.[26] The output of the message playback device can also be connected to a MOH telephone system so that customers who

[22] *See* A129, col. 1:16-19
[23] A131, col. 6:62-A132, col. 7:5
[24] *See* A101-148
[25] A138, col.20:23-A142, col.28:4; A145-148(Reexamination Certificate)
[26] A103, *Id.* '374 patent, Figure 2 illustrating the public address system at 45

call the store can hear the messages during the time they are placed on hold on the telephone system.[27]

Info-Hold obtained an assignment of the ’374 Patent and sells message playback devices of the type claimed.[28] An example of such a product sold by Info-Hold is its Info-Link system which offers a variety of patented features including remote programming capabilities and message selection.[29] In late 2005, Info-Hold began receiving feedback from potential customers indicating they were already in possession of a product that provided them with the features of the Info-Link system.[30] Info-Hold learned that the Defendants were supplying the product in question and subsequently undertook an investigation.[31] Info-Hold contacted Defendants and informed them of the patent-in-suit and what it claimed.[32] The Defendants assured Info-Hold they would look into whether their products infringed the ’374 Patent.[33] There is no evidence that Defendants followed up on this promise.[34] Info-Hold has never given the Defendants permission to use its patented technology.

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[27] *Id.* ’374 Patent, Figure 2 illustrating the MOH telephone system at 44
[28] A4788-4789; A4402-4403; A4409-A4412, 242:12
[29] A4402-4403
[30] A4479-4480
[31] *Id.*
[32] A2812-2867; A2815 at page 6; A2883-2892
[33] A2817-2819 at pages 14-15, 18, 24-25
[34] A3192, pg. 9

B. The Court Improperly Construed the Claim term "When a Caller is Placed on Hold"

The only claim construction issue in this appeal relates to the District Court's definition of "when a caller is placed on hold." The District Court applied the exact same definition of the term in this case and the related case of *Info-Hold, Inc. v. Applied Media Technologies Corporation*, Civil Action No. 1:08-cv-802, which is also on appeal to the Court of Appeals for the Federal Circuit [Case No. 13-1528].[35] As explained by Info-Hold in its briefing that was filed in the *AMTC* case, and as is further explained below, the District Court's definition of "when a caller is placed on hold" is erroneous as it is not supported by the description in the specification and because it excludes all embodiments of the claimed invention described in the specification.

C. Though Info-Hold Brought Suit to Address Muzak's Infringement, the District Court Dismissed all Claims on Summary Judgment

Info-Hold filed this case on May 3, 2011 so that the Court could address Info-Hold's allegations of patent infringement against the Defendants.[36] But, the District Court instead issued a series of rulings that ultimately resulted in the case being dismissed at the summary judgment stage due to Info-Hold's alleged lack of

[35] Case No. 13-1528 at Dkt. No. 27
[36] A1053-1059

damages evidence.[37] Though the relevant orders are more fully discussed in the argument that follows, in summary:

1. The District Court found that there was Insufficient Evidence from which the jury could find Inducement and Dismissed Muzak Holdings LLC from the Case

As discussed, Info-Hold contacted the Defendants pre-suit and told them about the '374 Patent and what it claimed.[38] Despite having this and related information before it as well as details pertaining to the specific intent possessed by each Defendant to cause the acts that infringe the asserted patent, the District Court found there was no evidence tending to show the Defendants possessed the requisite knowledge to induce infringement of the '374 Patent.[39] The Court accordingly granted Muzak summary judgment of no induced infringement and dismissed Muzak Holdings LLC from the case.[40]

2. The District Court Ultimately Dismissed the Case Based on a Lack of Damages Evidence

Info-Hold offered the expert testimony of Robert White, Certified Public Accountant, to assist the trier of fact on the issue of damages in this case. But, the District Court excluded Mr. White's testimony from trial.[41] The decision was

[37] A50-60; A63-69; A78-90; A91-99; A100
[38] A2812-2867; A2815 at page 6; A2883-2892
[39] A50-60
[40] *Id.*
[41] A81-87

based in large part on the District Court's belief that Mr. White was not shown to possess scientific, technical, or other specialized knowledge that will help the trier of fact to understand the evidence and that Mr. White's testimony was improperly tainted by allegedly relying on the now defunct 25% rule.[42] In the same Order, the District Court found that, in light of its decision pertaining to Mr. White, Info-Hold was left with "no potential damages witnesses for [it] to call at trial whatsoever, leaving it with no admissible evidence on reasonable royalty damages."[43] The court found that neither of the lay witnesses cited by Info-Hold, Mr. Hazenfield and Mr. Mason, could opine on reasonable royalty damages.[44] This decision of the court was based on rules of evidence applicable to expert testimony.[45] The Court went on to opine that Info-Hold's evidence of reasonable royalty damages was either not in the record as required by Fed. R. Civ. P. 56(c)(1) and/or was not presented in a form that is admissible in evidence at trial and therefore, Info-Hold had not made out a *prima facie* case of reasonable royalty damages.[46] Notably, Info-Hold had provided the Court with a variety of relevant documents including documents[47] relied upon by Muzak's damages expert, Mr. Paris, and Mr. Paris'

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[42] *Id.*
[43] A88
[44] *See* A4542-4545 (Info-Hold's Response at pp. 4-7); A88-90
[45] A88
[46] A89
[47] *See* A4542-4545; A4746-4786(documents cited); A4298-4300

expert report[48] as well as a license[49] to and assignment[50] of the patent-in-suit. The Court also had of record, amongst other things, the entirety of Mr. Paris's deposition transcript[51] which explained Mr. Paris's opinion expressed in his report that a royalty of 1 and 2 percent would be reasonable in this case.[52] The Court failed to consider any of these items and instead granted Muzak's Motion for Partial Summary Judgment[53] and ultimately dismissed Info-Hold's claims against Muzak based on that ruling.[54]

IV. SUMMARY OF THE ARGUMENT

1. Damages. As provided by 35 U.S.C. § 284 and acknowledged by this Court in *Dow Chem. Co. v. Mee Indus., Inc.*, 341 F.3d 1370, 1381 (Fed. Cir. 2003), there is an obligation on the courts to award at least a reasonable royalty to a patent

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[48] A4663 – 4745
[49] A4792-4838; A4413 at p. 249 ll. 3 – 14
[50] A4788-4789; A4410-4412
[51] *See* A4298-4300. Though Info-Hold did not cite to the deposition testimony of Dr. Paris in its response to Muzak's Motion for Summary Judgment, the deposition testimony was already of record in the case. Moreover, Muzak did not file a proper objection to or request to strike the Paris Report. Instead, Muzak presented attorney argument in its Reply brief that it did not have to call Dr. Paris to testify. Because Info-Hold did not have the opportunity to respond to Muzak's statements before the Ruling of the District Court, Info-Hold filed a Motion for Reconsideration where it addressed Muzak's incorrect assertions regarding the admissibility requirements of Rule 56 and cited the deposition testimony of Dr. Paris. A4973-4977
[52] A4299-4300
[53] A78-90
[54] A91-99

owner upon a finding that its patent has been infringed. This statutory obligation precludes dismissing a case on summary judgment based on an alleged inability to assess a reasonable royalty. Accordingly, the District Court's Order in this case, which did just that, should be reversed.

Even if the Court does not agree with this interpretation of Section 284, the District Court's decision to dismiss this case on summary judgment based on a perceived lack of evidence pertaining to reasonable royalty damages cannot stand. The District Court incorrectly failed to consider the evidence of record cited by Info-Hold which establishes there is a genuine issue of material fact on the reasonable royalty question. The District Court also incorrectly concluded that without its own witnesses to testify on a reasonable royalty, Info-Hold could not prove reasonable royalty damages. While the District Court was wrong in its conclusion regarding Info-Hold's purported lack of witnesses, the District Court was also wrong as a matter of law because Info-Hold can establish damages through Muzak's witnesses as well as through documentation.

Finally, this Court should also reverse the District Court's Order on reasonable royalty damages because the court abused its discretion in striking the expert testimony of Robert White, Info-Hold's damages expert. Though Mr. White is not a professional expert, he is a certified public accountant with years of experience in the industry relevant to this case. Mr. White performed a proper

analysis pursuant to *Georgia-Pacific* and should be permitted to testify at trial on the issue of reasonable royalty damages where any perceived deficiencies with Mr. White's testimony may be addressed on cross-examination.

2. Construction of "when a caller is placed on hold." The judgment of non-infringement should be vacated as the District Court erred by narrowly construing the claim term "when a caller is placed on hold" to mean "*at the moment* a caller is placed on hold." The District Court's definition is erroneous as it is not supported by the description in the specification and because it excludes all embodiments described in the specification. Because genuine issues of fact remain under a proper construction of this term and because the entry of the stipulated judgment of non-infringement of certain claims of the '374 Patent was based on the Court's definition of this term, the judgment of non-infringement should be vacated and the case remanded for further proceedings based on the correct construction.

3. Induced Infringement. To be liable for inducing the infringement of a patent, one must have knowledge that the induced acts constitute patent infringement. *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060, 2068, 2070 (2011). While this knowledge must be proven by the patentee, circumstantial evidence is sufficient. *Id.* In this case, the court dismissed Info-Hold's claims for induced infringement upon finding there was no evidence that the Defendants

possessed the requisite knowledge to induce. But, the evidence of record established that the Defendants had knowledge of the patent-in-suit, they were informed as to what the patent-in-suit claimed, they acted with specific intent, and they failed to compare the accused systems to the claims of the patent even though they said that they would. This sufficiently provides a basis for finding the Defendants knew the induced acts were infringing Info-Hold's patent. *See Smith & Nephew v Arthrex*, 502 Fed. Appx. 945, 950, 2013 WL 163823, *4-5 (Fed. Cir. Jan. 16, 2013).

V. ARGUMENT

Standard of Review

A district court's order on claim construction is reviewed *de novo*. *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1456 (Fed. Cir. 1998) (*en banc*).

This Court "reviews a district court's decision on summary judgment *de novo*, reapplying the same standard applied by the district court." *Hologic, Inc. v. SenoRx, Inc.*, 639 F.3d 1329, 1334 (Fed. Cir. 2011).

This Court applies the procedural law of the regional circuit in determining whether the testimony of an expert witness has been properly excluded. *Outside the Box Innovations, LLC v. Travel Caddy, Inc.*, 695 F.3d 1285, 1296 (Fed. Cir. 2012). Within the Sixth Circuit, the exclusion of expert testimony is reviewed for

an abuse of discretion. *Meridia Prods. Liab. Litig. v. Abbott Labs.*, 447 F.3d 861, 868 (6th Cir. Ohio 2006).

A. The District Court Erroneously Concluded that Info-Hold Could Not Establish Damages

1. 35 U.S.C. § 284 Does not Permit for the Dismissal of a Patent Infringement Case on Summary Judgment Based on a Purported Lack of Evidence Pertaining to a Reasonable Royalty

35 U.S.C. § 284 provides in relevant part:

> Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty...

The language of the statute is clear; no event shall justify compensating a patentee with less than a reasonable royalty when its patent has been infringed.[55] *See* 35 U.S.C. § 284; *see Dow Chem. Co.*, 341 F.3d at 1381. Accordingly, the District Court has an obligation to award some amount of damages for an infringement. *Id.* at 1382; *Riles v. Shell Exploration & Prod. Co.*, 298 F.3d 1302, 1313 (Fed. Cir. 2002) (remanding the case so the district court would have the "opportunity to carry out the mandate of the statute" which "promises the patentee, as a minimum, a reasonable royalty as compensation for infringement"). This is true even when there is "little or no satisfactory evidence of a reasonable royalty." *Dow Chem. Co.*, 341 F.3d at 1382; *Lindemann Maschinenfabrik GmbH v. American Hoist &*

[55] A4539-4542

Derrick Co., 895 F.2d 1403, 1407 (Fed. Cir. 1990). In such situations, "the district court should consider the so-called *Georgia-Pacific* factors in detail, and award such reasonable royalties as the record evidence will support." *Dow Chem. Co.*, 341 F.3d at 1382.

Recently, the statutory mandate of 35 U.S.C. § 284 has been evaded by several courts – including the District Court in this case – that have found allegedly insufficient evidence of a reasonable royalty at the summary judgment stage provides a basis for dismissing the patentee's claims of infringement. *See Apple, Inc. v. Motorola, Inc.*, 869 F. Supp. 2d 901, 906 (N.D. Ill. 2012); *Unicom Monitoring, LLC v. Cencom, Inc.*, Civ. No. 06-1166, 2013 WL 1704300 (D. NJ. April 19, 2013). In this case, as in *Unicom Monitoring*, the District Court relied heavily on the non-precedential *Apple* decision issued by Circuit Judge Posner in making its holding.[56] But, an inspection of *Apple* reveals that its basis for rejecting the clear language of 35 U.S.C. § 284 and the holding of this Court's decision in *Dow Chem. Co.* is unsound. In relevant part, *Apple* provides:

> Any intimation that proof of infringement is alone enough to warrant a remedial order (as when *Dow* posits an "obligation to award some amount of damages" if infringement is proved) was scotched by the Supreme Court in *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391-92 (2006).

[56] A89

869 F. Supp. 2d at 910. Critically, the *eBay* decision, which is about the permissive language of 35 U.S.C. § 283 and the Court's ability to enjoin infringement, is inapposite to the court's obligation to award a reasonable royalty under 35 U.S.C. § 284. *eBay*, 547 U.S. at 391-92 (discussing that § 283 of the Patent Act provides that "the several courts… *may* grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent…"). The language of 35 U.S.C. § 284 is vastly different from that of 35 U.S.C. § 283. 35 U.S.C. § 284 specifically provides that "no event" justifies the Court awarding less than a reasonable royalty upon finding infringement has been committed. Further, it is provided that when damages are not found by the jury, the court "shall assess them." *Id.* There is nothing permissive in the statutory language. *Id. eBay* simply does not support rejection of the *Dow Chem. Co.* decision or a permissive interpretation of Section 284.

In light of the presumption of damages when infringement is proven and the Court's obligation to assess damages when they are not found by the jury under 35 U.S.C. § 284, it is error for a court to find that claims of patent infringement may be dismissed on summary judgment due to an alleged lack of reasonable royalty evidence. The District Court's decision was in error and should be vacated and reversed.

2. The District Court Erroneously Dismissed This Case Based on an Alleged Lack of Evidence Pertaining to a Reasonable Royalty

Even if the Court does not agree that 35 U.S.C. § 284 precludes a court from deciding on summary judgment that a patentee is not entitled to reasonable royalty damages, the District Court's decision should be reversed in this case because it rested on two erroneous conclusions. First, the Court found that the evidence of a reasonable royalty cited by Info-Hold in/submitted with its briefing was "either not in the record as required by Fed. R. Civ. P. 56(c)(1) and/or [was] not presented in a form that is admissible in evidence at trial."[57] The conclusion was based on an incorrect interpretation of what is required by Rule 56. There was evidence of record that should have been considered by the District Court and which required the denial of Muzak's Motion.[58] Second, the Court concluded that with its expert on damages stricken, Info-Hold did not have any witness "expert or otherwise to testify for it on the issue of reasonable royalty damages" leaving Info-Hold "with no admissible evidence on reasonable royalty damages."[59] This conclusion was in error not only because Info-Hold does have witnesses other than Mr. White that may offer testimony pertaining to reasonable royalty damages but also because

[57] A89
[58] *See* A4542-4545, Info-Hold's Response in Opposition; A4966-4977, Info-Hold's Motion for Reconsideration
[59] A88-89

Info-Hold may offer evidence of reasonable royalty damages through documentation as well as through Defendants' witnesses.

a) The Court Erred in Disregarding the Evidence of Record that Tends to Show what a Reasonable Royalty would be in this Case

In this case, Info-Hold cited to and provided the Court with the following evidence in opposing Muzak's Motion for Summary Judgment that Info-Hold is not Entitled to a Reasonable Royalty[60]:

1. Info-Hold's assignment of the patent-in-suit ("the Hazenfield Assignment").[61]
2. Info-Hold's license of the patent-in-suit to Trusonic (hereinafter referred to as the "Trusonic License"). [62]
3. Documents[63] relied upon by Mr. Paris, in determining reasonable royalty rate damages as well as the expert report[64] of Mr. Paris.[65]

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[60] A4542-4545(citing to evidence in Response in Opposition)

[61] A4788-4789; A4410-4412(Mr. Hazenfield was deposed by Muzak regarding the terms of the assignment, that testimony was also part of the summary judgment record)

[62] A4792-838; A4413at p. 249 ll. 3 – 14 (Mr. Hazenfield authenticated the Trusonic License during his deposition, that testimony was part of the summary judgment record); A4298-4300 (Mr. Paris discusses the [redacted] Trusonic License in his deposition, which was also of record); A4651–4662 (see A4658 and A4660)(discussing Trusonic as licensee in interrogatory responses)

[63] A4746-4786

[64] A4664 – 4745

[65] A4300

4. Info-Hold financial documents that were relied upon by Mr. White in forming his opinion on reasonable royalty damages.[66]

In addition to the items specifically cited by Info-Hold in its Response, the record on summary judgment also included at least the following evidence relevant to reasonable royalty damages[67]:

5. A declaration of Mr. Hazenfield,[68] in which Mr. Hazenfield explains that he obtains 5% of the sales of Info-Hold's Info-Link system (which is covered by the patent-in-suit) as consideration for his assignment of the '374 Patent.

6. The transcript from the deposition of Mr. Paris in which Mr. Paris discusses his reasonable royalty opinion and explains the opinions of his report are complete and accurately reflect his opinions.[69]

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[66] A4613-4615; A4012, 66:03-A4019, 95:10

[67] A4966-4977, Info-Hold's Motion for Reconsideration

[68] A4402-4403

[69] A4216-4221(authenticating reports); A4226-4233 (confirming that his reports contain his entire opinion on damages and that they are complete and thorough); A4234-4239 (discussing convoyed sales and royalty base); A4240-4245 (providing opinion on a reasonable royalty rate); A4246-4252 (discussing profitability of the accused products); A4257- 4264 (Mr. Paris reduced the royalty base to just "voice revenues"); A4270-4288 (discussing the rolling base reports of Muzak and the revenue values shown in Exhibit E to the Paris Report); A4289 (Mr. Paris considered Muzak to be struggling financially); A4292-4312 (Mr. Paris considered the Trusonic License and the royalty obtained by Mr. Hazenfield in opining on reasonable royalties); A4316-4318 (discussing reasonable royalty damages calculation); A4319-4321 (Mr. Paris states MV control site could be driving demand); A4324-4337

7. Excerpts from the Deposition of Mr. Hazenfield where he discussed the Trusonic License and Hazenfield Assignment.[70]

On a motion for summary judgment, the court need only consider the cited materials, but it may consider other materials in the record. Fed. R. Civ. P. 56 (c)(3). The evidence of the non-movant is to be believed and all justifiable inferences are to be drawn in its favor. *See Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986).

In this case, the evidence of record pertaining to Muzak's own expert on damages, Mr. Paris, should have been outcome determinative. *See Dow. Chem. Co.*, 341 F.3d at 1381- 1382 (the evidence supporting the excluded expert's opinion had to be considered and a reasonable royalty awarded). Specifically, Info-Hold cited to the expert report of Mr. Paris as well as documents relied upon by Mr. Paris in opining that a royalty rate of between 1 and 2 percent would be reasonable in this case.[71] Mr. Paris's deposition transcript, in which Mr. Paris discusses his reasonable royalty opinion and explains and adopts the opinions of his report, was already of record. The District Court has entered no ruling that would preclude Mr. Paris from testifying at trial or that would prevent utilization of his deposition testimony.[72]

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[70] A4410-4413
[71] A4543 (citing to the Paris Report and documents relied upon by Mr. Paris)
[72] *See* A1025-1051

Included in the documents relied upon by Mr. Paris that Info-Hold submitted to the court with its Response were various Muzak business documents (including MUZ006403, MUZ006416, MUZ007017, and MUZ007074 that were submitted collectively as Exhibit C[73] to Info-Hold's Response).[74] These documents were utilized by Mr. Paris in opining on reasonable royalty damages.[75] Amongst other things, these documents provided the court with Muzak's revenues for the accused products.[76]

The Court in this case also had before it, the Trusonic License and the Hazenfield Assignment.[77] This Court has explained that in some cases, the most reliable license in assessing damages may have arisen out of litigation and in such a case it is proper to rely on that license to show a royalty rate "reasonably related to the technology" at issue. *ResQNet.Com, Inc. v. Lansa,* Inc., 594 F.3d 860 (Fed. Cir. 2010). It is telling that even Mr. Paris considered the Trusonic License and the Hazenfield Assignment relevant to the reasonable royalty determination and

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[73] A4746-4786

[74] A4319 (Mr. Paris testified that the documents he relied upon in forming his opinions are listed in his report)

[75] *See* A4743 (Exhibit G to the Paris Report which calculates Reasonable Royalty Damages points to Exhibit E to the Paris Report as a source of revenue data); *see also* A4726-4738 (Exhibit E to the Paris Report in which Mr. Paris indicates that MUZ006403, MUZ006416, MUZ007017, and MUZ007074 were the sources of his information)

[76] *See id.*

[77] A4788-4789; 4792-4837

gave them consideration.[78] The documents of record on summary judgment in this case, at least when viewed in a light most favorable to Info-Hold, demonstrate that Info-Hold is entitled to reasonable royalty damages upon a finding that Muzak has infringed its patent.[79]

In ruling on Muzak's Motion for Summary Judgment, the Court should have considered the aforementioned evidence pertaining to a reasonable royalty, but it did not. Instead, it concluded that the evidence was "either not in the record as required by Fed. R. Civ. P. 56(c)(1) and/or [was] not presented in a form that is admissible in evidence at trial."[80] As discussed above, this evidence was in the record. The District Court's reasoning under Federal Rule 56 was also flawed because Federal Rule 56 does not require that evidence submitted for summary judgment be in a form that is admissible at trial. Rule 56, as amended in 2010, "allows a party making or opposing a summary judgment motion to cite to materials in the record including, among other things, 'depositions, documents, electronically stored information, affidavits, or declarations' and the like." *ForeWord Magazine, Inc. v. OverDrive, Inc.*, Case No. 1:10-cv-1144, 2011 U.S.

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[78] A4298-4300

[79] This evidence of record distinguishes this case from that of *Apple, 869 F. Supp. 2d 901*, where the parties do not appear to have offered any license or assignment of the patent-in-suit and did not have reasonable royalty opinions from an expert that had not been stricken.

[80] A89

Dist. LEXIS 125373 *4 -*5 (W.D. Mich. Oct. 31, 2011). If the opposing party believes that such materials cannot be presented in a form that would be admissible in evidence, that party must file an objection. *Id.* (citing Fed. R. Civ. P. 56(c)(2)). "Significantly, the objection contemplated by the amended rule is not that the material 'has not' been submitted in admissible form, but that it 'cannot' be." *Id.*; *Brown v. Siemens Healthcare Diagnostics, Inc.*, Civ. No. DKC 11-0769, 2012 U.S. Dist. LEXIS 106569 (D. Md. July 31, 2012); *Jones v. UPS Ground Freight*, 683 F.3d 1283, 1292-94 (11th Cir. 2012).

Initially, the evidence cited by Info-Hold supporting a reasonable royalty should have been considered by the District Court because Muzak never made a proper objection to the evidence under Rule 56. While Muzak's Reply in Support of its Motion for Summary Judgment listed some of the materials that were cited by Info-Hold in opposing summary judgment and argued why those listed were allegedly not submitted to the Court in admissible form,[81] Muzak never properly objected – formally or informally – that the materials cited by Info-Hold *could not* be produced in admissible form.[82] Accordingly, Muzak never filed the objection required by Rule 56. Fed. R. Civ. P. 56(c)(2). Moreover, Muzak's arguments pertaining to admissibility are completely silent as to the Trusonic License and

[81] A4927–4930
[82] *See Id*.

Hazenfield Assignment that were cited and submitted by Info-Hold with its Response in Opposition to Muzak's Motion for Partial Summary Judgment. *Id.*; *See Wiley v. United States*, 20 F.3d 222, 226 (6th Cir. Ohio 1994)(if a party fails to object before the district court to the materials submitted by the other party in support of its position on summary judgment, any objections to the consideration of such materials are deemed to be waived). So, even if it could be said that Muzak properly objected to some of the evidence cited by Info-Hold, Muzak has not done so for the Trusonic License and Hazenfield Assignment. In any event, because the facts show that all of the evidence of record discussed above was either in admissible form or was such that it may be reduced to a form which is admissible at trial,[83] the issue of whether Muzak did or did not properly object is not outcome determinative.

[83] For example, of record is the deposition transcript of the inventor Mr. Hazenfield where he discusses the Trusonic License and Hazenfield assignment. A4413-4414. This deposition testimony was cited by Info-Hold in its Motion for Reconsideration. A4976-4977. The deposition transcript is already in admissible form, but it also establishes that Mr. Hazenfield can testify as to the contents of the Trusonic License and Hazenfield assignment that were cited by Info-Hold in its Response in Opposition (A4545). His sworn declaration giving his personal testimony regarding his assignment of the '374 Patent and the 5% royalties he receives also demonstrates that such evidence could be presented as admissible evidence at trial. A4402-4403. The deposition transcript of Dr. Paris is similarly in a form that is admissible at trial and establishes that the opinions expressed in his report (which was cited in Info-Hold's Response in Opposition at A4542-4543) may be reduced to admissible form. A4975-4976 (citing to the deposition testimony); *see also infra* footnote 69 of this brief citing to specific portions of his

In light of the language of 35 U.S.C. §284 which requires the award of a reasonable royalty upon a finding of infringement, Info-Hold respectfully submits that all relevant evidence of record should have been considered by the Court. The Court failed to give that evidence any consideration whatsoever yet alone view the evidence in a light most favorable to Info-Hold and its decision should be vacated. *See Dow Chem. Co.*, 341 F.3d at 1381 (Fed. Cir. 2003); 35 U.S.C. § 284.

b) Info-Hold has Witnesses through which to Present Evidence of a Reasonable Royalty and further may Present such Evidence through Defendants' Witnesses as well as through Documents

Similarly, the Court incorrectly concluded that Info-Hold did not have witnesses to testify to a reasonable royalty rate leaving it with no admissible evidence on the reasonable royalty rate issue. Initially, Info-Hold does have witnesses that may offer testimony pertaining to a reasonable royalty.[84] In its initial disclosures, Info-Hold identified Mr. Joey Hazenfield and Mr. Mark Mason

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deposition transcript. And, during his deposition, Dr. Paris testified that he relied upon business documents of Muzak. *Id.*; A4545 (Info-Hold citing documents in its Opposition); A4272-4273 (Paris Testimony regarding the documents considered); A4975 (Info-Hold's motion for reconsideration citing the Paris deposition). These documents are admissible as exceptions to the rule against hearsay. Fed. R. Evid. 803 (6)(B). Alternatively, a Muzak representative may be subpoenaed to discuss the contents of the documents at trial. *See* Fed. R. Civ. P. 45; *Gerald Godec v. Bayer Corp.*, Case No. 1:10-cv-224, 2012 U.S. Dist. LEXIS 49249 at *2 - *5 (N.D. Ohio April 9, 2012). (A4976)

[84] A4542-4545 (Info-Hold citing to Mr. Hazenfield and Mr. Mason in its Response in Opposition); A4548-4553; 4968-4973

as individuals with knowledge of the relevant facts.[85] The subjects of information identified for both individuals broadly encompass information relevant to the *Georgia-Pacific* analysis. *See Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970). Of course, witnesses are not required to use any or all of the *Georgia-Pacific* factors when testifying about damages in patent cases. *Whitserve, LLC v. Computer Packages, Inc.*, 694 F.3d 10, 31 (Fed. Cir. 2012).

Mr. Hazenfield is the named inventor of the patent-in-suit and is also the President/CEO of Plaintiff Info-Hold.[86] Info-Hold's Initial Disclosures described the subjects of information in Mr. Hazenfield's possession as:

> The development, marketing and business decisions pertaining to the Info-Hold product line; The conception, design, development and reduction to practice of the subject matter of the patent brought under this suit.

Id. These subjects encompass categories of information deemed relevant to a reasonable royalty by *Georgia-Pacific*. For example, business decisions pertaining to the Info-Hold product line includes information such as the prices at which the patented systems were sold, corresponding profits, and decisions as to whether to grant licenses to the patents that cover the Info-Hold product line. The record on summary judgment included, amongst other things, an assignment of and a license

[85] A4556
[86] A4556

to the patent-in-suit and a declaration detailing Info-Hold's assignment of the asserted patent, each of which was executed by Mr. Hazenfield.[87] The record further included Mr. Hazenfield's deposition testimony regarding a reasonable royalty rate as solicited by Muzak.[88]

Mr. Mason, a long-time Info-Hold employee, was disclosed by Info-Hold as being in possession of subjects of information including "Features and functions of Defendants products and services and the impact on Info-Hold in the marketplace as a result of Defendants' offers for sale and sales of the Defendants' products and services."[89] Based on this broad disclosure, Mr. Mason can testify to the commercial relationship of the parties, the effect of selling the patented item on the promotion and sales of non-patented items, the profitability of the patented product, the utility and advantage of the patented product over the prior art, the nature of the patented invention, and commercial success of the patented invention. All of these factors are relevant to the reasonable royalty rate determination in this case and fall within the subjects of information identified for Mr. Mason in Info-Hold's initial disclosures.

[87] A4788-4789; 4792-4838; A4402-4403
[88] A4412-4413.
[89] A4556

In granting Muzak's Motion for Summary Judgment, the District Court rejected Info-Hold's assertion that Mr. Hazenfield and Mr. Mason could properly present testimony that could be utilized in determining a reasonable royalty stating:

> [i]f Plaintiff were to present Mr. Hazenfield, Mr. Mason, or Mr. Wood as witnesses on reasonable royalty damages to testify to a hypothetical negotiation, their testimony would be excluded under Fed. R. Civ. P. 26(a)(2)(C) and Fed. R. Evid. 702, 703, and 705.[90]

But, the provisions cited by the Court all relate to the admission of expert testimony. Expert testimony is not required to establish damages in a patent case. 35 U.S.C. § 284; *See also* Fed. R. Evid. 701 (Opinion Testimony by Lay Witnesses). In fact, the court in *Georgia-Pacific* considered the testimony of the plaintiff's CEO admissible and relevant as to the reasonable royalty rate issue. The Court found it important that the CEO would have made the final decision concerning the hypothetical royalty to be negotiated with the Defendant. *Georgia-Pacific Corp.*, 318 F. Supp. At 1142. The District Court's decision, to the extent it found that Info-Hold did not have witnesses to call at trial to testify to a reasonable royalty, is in error in light of Info-Hold's disclosure of its president and CEO, Mr. Hazenfield, and Info-Hold's long-time employee Mr. Mason. *See Seitz v. Envirotech Sys. Worldwide Inc.*, Civ. No. H-02-4782, 2008 U.S. Dist. LEXIS 17395 at *9-*19 (S. D. Tex. Mar. 6, 2008)(finding CEO qualified to offer lay

[90] A88

testimony on reasonable royalty damages); *see also 405 Condo Associates LLC v. Greenwich Insurance Co.*, 11 Civ. 9662, 2012 WL 6700225 (S.D.N.Y. Dec. 26, 2012); *Carnegie Mellon Univ. v. Marvell Tech. Group. Ltd.*, Civ. No. 09-290, 2013 U.S. Dist. LEXIS 58331 (W.D. Pa. Apr. 24, 2013); *Lativafter Liquidating Trust v. Clear Channel Communs., Inc.*, No. 08-5959, 345 Fed. Appx. 46, 50-51 (6th Cir. Aug. 18, 2009).

But moreover, the law is clear that Info-Hold does not need its own witnesses to testify regarding a reasonable royalty and may establish a reasonable royalty through the examination of Defendants' witnesses as well as through documentation. *See Versata Software, Inc. v. SAP Am., Inc.*, 717 F.3d 1255, 1267-1268 (Fed. Cir. 2013); *Dow. Chem. Co.*, 341 F.3d at 1381- 1382. For example, the entire transcript from the deposition of Mr. Paris,[91] and his expert report,[92] were in the record when the Court granted Muzak's Motion for Summary Judgment. The Court failed to consider Info-Hold's ability to present evidence of a reasonable royalty rate through Mr. Paris and other Muzak witnesses. *See Versata Software, Inc.*, 717 F.3d at 1267-1268 (only evidence of a reasonable royalty came from Defendant's expert). And Even if neither Mr. Paris nor Mr. White testifies at trial, the Court may review and consider the documents they relied upon in preparing

[91] A4215-4353; *see supra* at footnote 69
[92] A4663-4745

their opinions on damages. Many of those documents were also in the record.[93] *See Dow. Chem. Co.*, 341 F.3d at 1381- 1382. These documents included the Trusonic License and Hazenfield Assignment – items which in and of themselves are enough to create a genuine issue of material fact to overcome summary judgment. It was error for the Court to conclude that without its own witnesses to offer testimony on a reasonable royalty rate, Info-Hold was left with no admissible evidence from which a reasonable royalty rate could be determined.

In responding to Muzak's Motion for Summary Judgment Info-Hold established that Muzak had not met its burden of demonstrating an absence of a genuine dispute pertaining to a reasonable royalty and further established that there is a genuine issue of material fact which should have precluded summary judgment. Info-Hold respectfully requests that this Court correct the errors committed below.

3. The District Court Abused its Discretion in Striking the Expert Report and Testimony of Robert White

Under Rule 702, a district court abuses its discretion in striking expert testimony if it basis its ruling on an erroneous view of the law or a clearly erroneous assessment of the evidence. *Ky. Speedway, LLC v. Nat'l Ass'n of Stock Car Auto Racing, Inc.*, 588 F.3d 908, 915 (6th Cir. 2009). In this case, both types

[93] A4613-4615; A4746-4786; A4792-4838; A4788-4789

of errors scar the District Court's decision to strike the testimony of Info-Hold's expert on damages, Mr. White.

Mr. White is a Certified Public Accountant with over 40 years experience in the industry and a 16 year history of performing tax and audit work for Info-Hold.[94] This experience has made Mr. White knowledgeable as to how the patented technology is sold, knowledgeable of the relevant industry, and knowledgeable of Muzak and the industry's common practices.[95] Further, Mr. White has extensive experience in the negotiation of franchisee agreements providing him valuable insight on the realities of arm length negotiations.[96]

Mr. White utilized the widely accepted *Georgia –Pacific* factors and applied them to the facts of this case, to formulate an opinion on reasonable royalty damages.[97] For example, Mr. White begins his analysis under the *Georgia – Pacific* factors by addressing the Trusonic License as providing an ultimate floor to the royalty rate that would be accepted by Info-Hold and Muzak.[98] Mr. White's *Georgia-Pacific* analysis goes on to consider the royalty rate of [redacted] that Muzak charges its franchisees as well as published royalty rate standards by industry

[94] A4885-4887 (Info-Hold's Response to Motion to Strike); A3998, 9:01 – A3999, 13:15; A4000, 18:13 – 20:15
[95] A4006, 43:07 – A4007, 45:08; A4007, 48:19 –A4009, 53:01
[96] A4000, 18:13 – 20:15; A4054, 234:03 – A4055, 239:14
[97] A3875- 3885
[98] A3879-3880

which indicate that royalty rates of 10.5% and 11.7% are typical in industries related to the accused systems.[99] Mr. White additionally cites to the reasoning of *Minco, Inc. v. Combustion Engineering, Inc.*, 95 F.3d 1109, 1119 – 1120 (Fed. Cir. 1996) in which the Court found that a 20% royalty rate, though high, was supported by the evidence.[100] While the patent at issue in *Minco* was not directed to music on-hold technology, Mr. White indicates that the portion of the case he highlighted supports his conclusion regarding the reasonable royalty rate that would have been reached by Info-Hold and Muzak because its facts are in many critical ways the same as those at issue in this case.[101]

In this case, the Court placed undue weight of Mr. White's lack of expert witness experience[102] and on Mr. White's utilization of Info-Hold personnel and Dr. Paris as sources of information and accordingly found Mr. White's opinions unreliable when they are not.[103] In focusing on Mr. White's lack of expert witness experience, the District Court ignored Mr. White's real world experience as a tenured CPA with years of work in the industry relevant to this case making him qualified to render expert testimony on the reasonable royalty issue. *De Jager Constr. v. Schleininger*, 938 F. Supp. 446, 449 (W.D. Mich. 1996) ("A CPA

[99] A3879-3880; A4011, 61:21 – 63:01
[100] A3880 (referring to exhibit 105a which is the *Minco* case); A3915-27
[101] A3880; A3915-3927(as highlighted by Mr. White)
[102] A81-2
[103] *See Id.*; A4875-4880

generally possesses the 'specialized knowledge' to qualify as a helpful expert witness under the proper circumstances.") And though Mr. White did utilize Info-Hold personnel as a source of information[104] and relied upon Muzak's sales figures as produced by Mr. Paris,[105] this did not render Mr. White's opinion on a reasonable royalty unreliable. The District Court failed to distinguish the issue of whether figures relied upon and assumptions made by an expert are ultimately established by the evidence produced at trial, from the utilization of untested methodology: the latter of which can result in a finding of inadmissibility. *Compare Johnson v. Manitowoc Boom Trucks, Inc.*, 484 F.3d 426 (6th Cir. 2007)(expert testimony reliant on untested methodology should be stricken) *with TK-7 Corp v. Estate of Barbouti*, 993 F.2d 722, 731 (10th Cir. 1993)(the fact that the expert assumes certain figures does not make his testimony inadmissible, whether the assumed facts are ultimately shown by the evidence at trial is a distinct issue).

The Court also abused discretion in this case by relying upon a clearly erroneous assessment of the evidence. For example, the court concluded that Mr. White's testimony relied on "an improper legal standard for calculating a

[104] A3997, 7:15-8:13; A4002, 25:05-A4003, 29:21; A4006, 43:07- A4009, 53:13; A4012, 66:03-A4019, 95:10

[105] *See* A4002, 25:05-A4003, 29:21; A4030, 137:02-138:04; A4026, 122:12-132:22

reasonable royalty, without relying on other, legally acceptable grounds" and was therefore not sufficiently tied to the facts of the case to aid the jury.[106] Specifically, the Court found that Mr. White relied upon the defunct 25% rule in forming his opinion on a reasonable royalty. *Id.* But, this is not the case.[107] While Mr. White's expert report on damages indicates that the 25% rule is "an alternative method" for determining a reasonable royalty rate, Mr. White has made clear that his determination regarding a reasonable royalty rate in this case is not dependent on the 25% rule which has been rejected by the Federal Circuit.[108] To conclude Mr. White had no valid basis for his reasonable royalty conclusions, the Court discredited other considerations that were made by Mr. White by incorrectly concluding that Mr. White found they were not pertinent or they were not considered in forming his opinion.[109] This conclusion is not supported by Mr. White's report or his testimony.[110]

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[106] A83
[107] A4880-4884
[108] A3879; A4011, 61:21 – 63:01; A4039, 173:06 – 176:18
[109] A85
[110] A4010, 60:21 – A4012, 65:12 (discussing utilization of *Minco* and other cases as well as consideration given to materials establishing Muzak's franchise royalty rates); A4037, 166:08-A4038 172:15 (Mr. White testifies that the Trusonic agreement is both "some evidence" of a reasonable royalty and that it would not be relevant to a hypothetical negotiation occurring prior to its execution, but Mr. White specifically rejects the allegation made by Muzak's counsel that he did not find *Minco* and the other cited cases or Muzak's franchising royalty rate relevant); A3879 (Mr. White's report utilizes the Trusonic license as a floor to the reasonable royalty amount)

Mr. White properly applied the accepted *Georgia-Pacific* methodology to Info-Hold's version of the disputed facts. To the extent that Muzak believes Mr. White's determined royalty rate is not correct, this is to be taken up on cross examination and does not indicate that Mr. White's opinions should be excluded. *See Daubert v. Merrell Dow pharms.*, 509 U.S. 579, 596 (1993).

B. The District Court Erred in Defining the Claim Term "When a Caller is Placed on Hold"

The claim term at-issue is "when a caller is placed on hold." This term is used in multiple claims in various phrases.[111] These phrases can generally be categorized into the following categories:

1. access of message(s) [from storage]…when a caller is placed on hold;
2. providing of message(s) [from playback device]…when a caller is placed on hold;
3. play/playback of message(s)…when a caller is placed on hold.[112]

The question on appeal is whether the claims of the '374 Patent recite an invention where the access of message(s), providing of message(s), and playback of message(s) occurs *during the time* the caller is placed on hold, as proposed by Info-Hold or *at the moment* of placing the caller on hold as asserted by Muzak and adopted by the District Court. As explained in detail below, the District Court's

[111] A143-148 at claims 7, 17, 22, 23, 26, 28, 30-34, and 37
[112] *See id.*

definition is erroneous because it is not consistent with the description in the specification and because it excludes all embodiments described in the specification, including the preferred embodiment.

1. An Ordinary Meaning of "When" is "During the Time"

Under basic principles of English grammar, it is clear that the term "when" is used in the claim term at-issue as a conjunction that connects two parts of a phrase or sentence. For example, claim 7 recites the limitation of "…playing selected messages…when a caller is placed on hold."[113] It is also common knowledge that as a conjunction, "when" can mean "during the time" or it can mean "at the moment." For example

1. He went fishing *when* he was a boy. (during the time)
2. Put your pencils down *when* the bell rings. (at the moment)

The District Court confirmed these possible ordinary meanings in the Claim Construction Order by stating ".... 'when' can mean either a momentary event or 'while,'…"[114] The District Court also stated: "[t]he primary dispute between the parties is whether the phrase indicates that message playback takes place *during* the time the caller is placed on hold or whether the playback *starts* when a caller is placed on hold." *Id*.

[113] A143-148, '347 C1 Patent reexamination certificate, claim 7, col. 1:35-37
[114] A7, Court's Claim Construction Order from *Muzak* case, pg. 7

The Court rejected Plaintiff-Appellant's proposed definition and defined "when the caller is placed on hold" to mean "at the moment the caller is placed on hold."[115] As set forth in detail, below, construing the claim term "when" to mean "at the moment" is clearly erroneous as this definition is not supported by the specification, is not consistent with the entire purpose of on-hold telephone systems to provide music or advertisement messages *during* the time the caller is on hold (not just "at the moment" of placing the caller on hold), and excludes all embodiments described in the specification, including the preferred embodiment.

2. The Specification of the '374 Patent Provides Support for Construing the Term "When" to Mean "During the Time" Instead of "At The Moment"

Notwithstanding the myriad cases from this court pointing out the importance of the specification in conducting a proper claim construction, the District Court's Order on Claim Construction lacked a single reference to the specification of the '374 Patent. By ignoring the specification, the District Court issued an order on claim construction which renders the patent's claims inapplicable to each embodiment described therein.

The specification of the '374 Patent describes MOH systems where customers are provided with messages (*e.g.*, music or advertisements) "while" they

[115] A8, Court's Claim Construction Order, pg. 8

are "placed on hold and waiting for assistance."[116] *See, also* (A131, '374 Patent, col. 6:45-47) (stating "…the system 10 is described for use with MOH [Message On Hold] telephone system 44 to accommodate customers awaiting assistance via telephones); (A132, '374 Patent, col. 7:1-3) (stating "…system 10 simplifies the process of selecting message playlists and allows a system user to more effectively maintain a promotional program for customers placed on hold…").

Accordingly, it is clear that the specification describes a system where the customer/caller is provided with messages *during* the time he or she is on hold awaiting assistance - not just "at the moment" of placing the caller on hold.[117] These excerpts from the specification also make it clear that the term "placed on hold" describes the *condition* of the customer (*i.e*., a placed on hold condition) and not the momentary act of *placing* the caller on hold.[118] In other words, the excerpts from the specification above, the term "placed on hold" modifies/describes the term "customer" and is not used as an expression of action being taken by the system or user of the system.

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[116] A129, '374 Patent, col. 1:16-19

[117] Plaintiff-Appellant's arguments set forth in filed briefs at A1565-1577, A1581, A1636-1647, A1651-1654

[118] A1640-1643, pg. 6 of Plaintiff's Response to Defendant's Brief in Support of Claim Construction, arguing "[t]o be *placed* on hold is to be *put* in the hold condition. Companies want their messages to be played when a customer is in the hold condition. The '374 does that." In fact, the words "at the moment" or anything close to these words are not found in the specification of the '374 Patent, much less when discussing the topic of placing the callers on hold.

Info-Hold's interpretation is consistent with the whole purpose of on-hold telephone systems that are designed to keep the caller occupied and engaged during the entire period he or she is waiting on hold for assistance and not just at the very beginning moments of being put on hold (*e.g.*, using the District Court's definition of "at the moment," the caller would hear a message at the very moment of being put on hold then silence thereafter).[119] *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005)(*en banc*) (citing *Merck & Co. v. Teva Pharms. USA, Inc.*, 347 F.3d 1367, 1371 (Fed. Cir. 2003) finding:

> A fundamental rule of claim construction is that terms in a patent document are construed with the meaning with which they are presented in the patent document. Thus claims must be construed so as to be consistent with the specification, of which they are a part.

Yet, as noted, the District Court did not make a single reference to the '374 Patent specification either to support its construction or to refute Info-Hold's proposed construction.

The above excerpts from the '374 Patent describing the system and invention of the '374 Patent confirm the ordinary and customary meaning of the term "when" as used in the claims of the '374 Patent means "during the time." This definition of "when" makes sense in the context of the multiple uses of this

[119] For example, see claim 7 which recites, *inter alia*, "a plurality of message playback devices…being programmable to….provide said accessed message to said output…when a caller is placed on hold."

term in the context of the claims. In other words, because on-hold telephone systems are generally intended to provide messages to the callers for the duration of the time they are on hold waiting for assistance, it follows that the access of message(s), providing of message(s), and playback of message(s) occurs *during the time* the caller is placed on hold as proposed by Plaintiff-Appellant not just *at the moment* of placing the caller on hold as adopted by the District Court.[120]

3. Limiting the Claims to Systems that Play Accessed Messages Only "At The Moment" of Placing a Caller On Hold Excludes all Described Embodiments

a. The Systems Described in the '374 Patent do not Start Message Playback "At The Moment" of Placing a Caller On Hold

Muzak argued to the District Court in its claim construction brief that the claim term "when a caller is placed on hold" means that message playback must *start* at the momentary act of placing the caller on hold and from the *beginning* of the message (*i.e*, on-hold callers cannot be put on hold in the middle of a message).[121] Accordingly, in its Claim Construction Order, the District Court

[120] It is also instructive that the district court improperly substituted the active-voice gerund "placing," which is not found in any claim, with the actual claim term "placed," which is a passive-voice past participle. As mentioned above, this substitution improperly places the focus on the user of the system rather than the outside party (caller), for whom the language and purpose of the entire system is directed.

[121] A1424-1431, Muzak arguing "playing a previously chosen message when a caller is placed on hold must mean that the message is played from its identified beginning when (*i.e.*, at the moment) a caller is placed on hold.; *See, also* A1431,

framed the issue by stating: "[t]he primary dispute between the parties is whether the phrase indicates that message playback takes place *during* the time the caller is placed on hold or whether the playback *starts* when a caller is placed on hold." [122]

On this issue, the District Court erroneously adopted Muzak's argument. In its Claim Construction Order, the District Court found that "when the caller is placed on hold" means "at the moment the caller is placed on hold" and that the claim terms cannot cover "continuous loop" systems where callers can be put on hold in the middle of a message playback (*i.e.*, message playback starts at the moment of placing the caller on hold).[123]

As explained in detail below, the Court's construction is erroneous as none of the embodiments disclosed in the '374 Patent start the process of message playback at the momentary act of placing a caller on hold. Furthermore, because message playback occurs independently of the act of placing the callers on hold, all of the embodiments described in the '374 Patent involve systems where callers can be placed on hold in the middle of a message being played. A claim interpretation

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Muzak arguing "[d]ropping the user into the middle of a message or into the middle of a queue would defeat the purpose of the controlled sequencing as described in the '374 Patent."

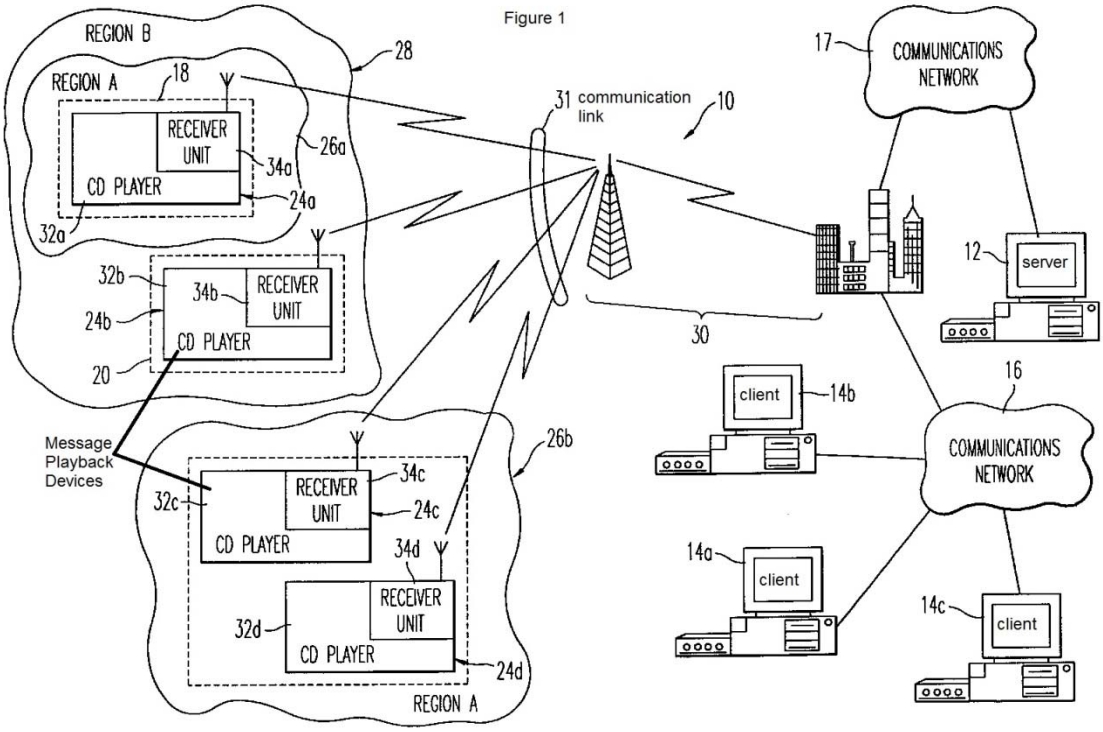
[122] A7

[123] A7-8. The District Court's reasoning for excluding "continuous loop" systems is circular. That is, the District Court first concludes that the term "when a caller is placed on hold" must mean "at the moment" and then reasons that because messages are only accessed "at the moment a caller is placed on hold" that messages played to callers put on hold must be played from their beginning. *Id.*

that excludes a preferred embodiment from the scope of the claim is rarely, if ever, correct. *On-Line Techs., Inc. v. Bodenseewerk Perkin-Elmer GmbH*, 386 F.3d 1133, 1138 (Fed. Cir. 2004).

i. The specification is clear: the control signals dictate when message playback starts

Figure 1 of the ’374 Patent illustrates a preferred embodiment of the message delivery system. Figure 1 of the ’374 Patent is reproduced below and labeled to indicate the client computers 14, the remote server computer 12, and the plurality of message playback devices.



As depicted in Figure 1, once the user has selected the information for controlling the message playback devices at his or her computer (client computer

14), this information is sent to the server computer 12.[124] As previously discussed, with this information, the server computer generates control signals for transmission to the plurality of message playback devices 24 located at stores across the country.

As described below in detail with reference to Figure 2, these control signals received by the plurality of message playback devices are used to control and start the access and playback of messages –the momentary act of placing a caller on hold does not start the message playback. As stated explicitly in the ’374 Patent: “[t]he server 12 transmits the control signals to remotely located message playback devices 24 having optical disc players 32 and one or more compact discs containing messages to control which of the messages are played and when they are played.”[125]

[124] A102, ’374 Patent, Figure 1
[125] A134, ’374 Patent, col. 12:59-63

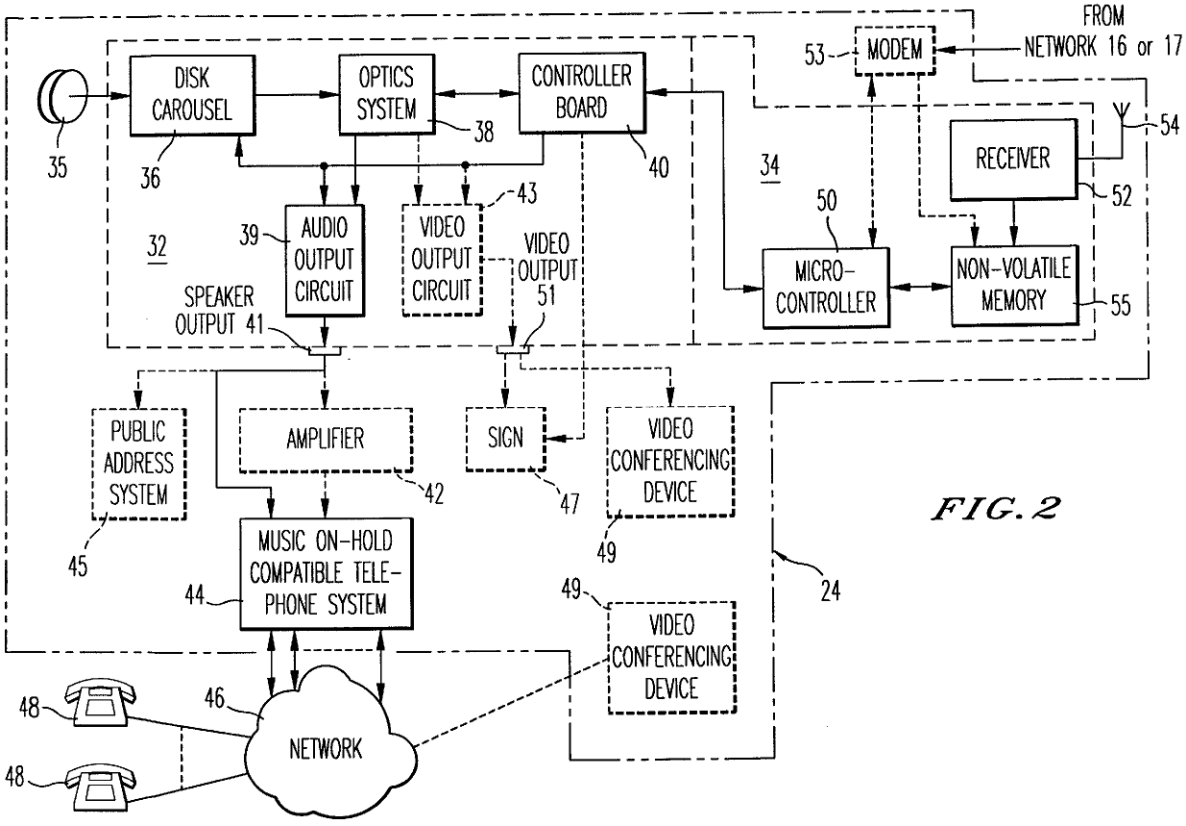


FIG. 2

Figure 2 illustrates the preferred embodiment of a message playback device. Messages are accessed from the optical disc 35 and provided to the output 41 of the playback device for playback. Note that this output is connected to various types of output devices such as the public address system 45 (*e.g.*, speaker system) and the MOH telephone system 44.

The receiver 52 of the message playback device receives the control signals transmitted from the server computer and stored in the memory 55.[126] The

[126] A131, '374 Patent, col. 5:50-col. 6:37

message playback device uses these control signals to start message playback (*e.g.*, access messages off the optical disc 35 and provide them to the output 41 for playback to the output devices). Messages are selected and accessed for playback based upon the playlist data contained in the control signal.[127] For example, the '374 patent discusses a series of advertising messages that can be individually selected and played.[128] Accordingly, these selected messages are accessed from storage and provided to the output of the playback device independent of the momentary act of placing a caller on hold. In fact, all the messages in the entire playlist can be accessed and provided to the output for playback (and repeated numerous times), *without a single caller being put on hold*.[129] If a customer does call into the system and is put on hold by the telephone system 44, that caller will be put on hold in the middle of the message being played at the time the caller is put on hold (not from the beginning of the message as required by the Court's construction).

The claims of the '374 Patent provide further support that message access and playback starts based on the control signals received from the remote server. For example, many of the claims at-issue include limitations that the access and

[127] *Id.*, '374 Patent, see col. 6:34-36
[128] A130-131, '374 Patent, see col. 4:58-col. 5:17
[129] In such a circumstance, messages have been accessed and provided to the output for playback even though those messages are not being heard by anybody since nobody is on hold.

playback of messages are "in accordance with said control signals."[130] Other claims even state that control signals are generated in part by "when said selected message is to commence playing" explicitly reciting the feature of using the control signal to start message playback.[131] The words of the claims are themselves the starting point for claim construction because the claim language defines the bounds of the scope of the protected invention. *Johnson Worldwide Assocs., Inc. v. Zebco Corp.*, 175 F.3d 985, 989 (Fed. Cir. 1999).

Because the control signals sent from the remote computer are used by the message playback device to start message playback, it follows that the Court's construction of "when a caller is placed on hold" is erroneous as none of the embodiments disclosed in the '374 Patent start the process of message playback at the momentary act of placing a caller on hold. The Court's construction of the term cannot be correct as it does not read on any of the embodiments described in the '374 Patent.

ii. The act of placing the caller on hold does not start message playback (e.g., pushing the on-hold button of the telephone system)

In order for the District Court's construction of "when a caller is placed on hold" to read on the preferred embodiment (or any embodiment) described in the

[130] (A145, *e.g.*, '374 C1 Patent cert., claim 7)
[131] (A145-146, *e.g.*, '374 C1 Patent cert., claim 17)

’374 Patent, there must be some way for the disclosed embodiments to start the access and playback of messages “at the moment” of placing a caller on hold so that the message is started from the beginning of the message and not mid-stream. There is no embodiment disclosed in the ’374 Patent that operates this way. In other words, at the moment of placing the caller on hold by the MOH system, there is no signal or communication sent to the message playback device instructing the playback device to start message playback (*e.g.*, the accessing and playing of messages). *See*, for example, Figure 2 of the ’374 Patent showing a one-way arrow from the output of 41 of the message playback device to the MOH telephone system.[132] This is a one-way audio/video output that does not accept data instructions from the MOH telephone system. So for example, if a telephone operator gets a call from a customer and pushes the “hold” button of the telephone system to put the customer on hold, this event does not result in instructions to the message playback device to start message playback. In the embodiments described in the ’374 Patent, the message playback device is oblivious to when, and if, the caller is put on hold (this is why customers are placed on hold in the middle of a message already playing instead of the beginning of a message). This is further evidence demonstrating the impossibility of the District Court’s construction.

[132] A103

b. The Preferred Embodiment Described is Adapted to Access, Provide, and Play Messages During the Time the Caller is Waiting On Hold

Plaintiff-Appellant's proposed definition on the other hand is consistent with the embodiments disclosed in the specification. Plaintiff-Appellant's proposed construction of "when" to mean "during the time" results in claims that recite an invention that is adapted to access and play messages "*during the time* a caller is placed on hold." As explained in the discussion of Figures 1 and 2 above, the preferred embodiment is adapted to operate in this fashion. In other words, the playlist contained in the control signal sent from the remote server dictates what messages (*e.g.*, music or advertisements) are being played and in what sequence. During the time a caller is in the "placed on hold" condition, after the playing of a selected message of the playlist, the message playback device accesses the next message in the playlist and provides that message to the output for playback to the caller on hold. This process of accessing and playing messages can continue repeatedly *during the time* the caller is placed on hold (depending on how long the caller is in the "placed on hold" condition). For example, if a customer is placed on hold for a long period of time, multiple messages will be accessed and played by the message playback device "during the time" the caller is placed on hold.[133]

[133] *See, e.g.*, A131, '374 Patent, col. 5:50-col. 6:44, discussing how the message playback device uses the playlist in the control signal to access messages (individual tracks on the CD) and provides them to the output for playback. The

This is consistent with the intent of on-hold telephone systems to avoid the situation where the customer is sitting in silence as he or she is on hold waiting for assistance. Accordingly, Plaintiff-Appellant's proposed construction of "when" to mean "during the time" is consistent with the specification of the '374 Patent and the embodiments disclosed therein.

4. There Was No Disclaimer of Claim Scope Over "Continuous Loop" Type Systems Where Callers are Put On Hold in the Middle of a Message

In arguing for its definition of "when" to mean "at the moment," Muzak incorrectly argued that the patentee distinguished the invention over "continuous loop" systems and therefore the recited claim phrases of accessing, providing, and playing messages "when a caller is placed on hold" must exclude continuous loop systems where callers are put on hold in the middle of a message.[134] Muzak's mischaracterization of the prosecution history of the '374 Patent, was one cause of the District Court's erroneous claim construction as the Court incorrectly came to believe that a proper construction of "when a caller is placed on hold", must exclude all continuous loop type systems where callers are dropped midstream into a message already playing.[135]

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message playback device access the messages from the CD in accordance with the message sequence set forth by the playlist. *Id.*

[134] A1426-1427, A1430-1432, Defendants' Claim Construction Brief, pg. 9-10, 13-15

[135] A7-8, Claim Construction Order, pgs. 7-8

Contrary to the arguments of Muzak, the patentee never criticized or disclaimed "continuous loop" type systems in general. The patentee criticized continuous loop *cassette tape* systems.[136] For example, the patentee criticized continuous loop cassette tape systems because the tapes are subject to wear, tape players are subject to malfunctioning, individual messages cannot be selected without moving the tape forward or backward, and because they have inferior sound quality.[137] The '374 Patent describes a system where many of these problems are solved by the use of an optical disc player, instead of a tape player, that allows the user to select individual messages (*e.g.*, individual tracks on the CD) and message sequences from the disc (not possible on a tape cassette), and where the optical disc has a better sound quality.[138]

The patentee never criticized these cassette tape systems because they repeated the messages (in a loop) or because they only allowed a caller to be "dropped midstream" into a message. In fact, as discussed above, the preferred embodiment described in the '374 Patent allows message playlists to be played in a repetitive fashion.[139] Furthermore, because the message playback system described in the '374 Patent is oblivious to when the caller is put on hold, the system is

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[136] A129, '374 Patent, col. 1:19-60; A138, col. 19:60-64)
[137] *Id.*
[138] *Id.*
[139] A137, col. 18:1-5; *see, e.g.*, A145, claims 7, 13, 15 reciting limitations to the repeating of messages

adapted to place the caller on hold in the middle of a message. Accordingly, the District Court's claim construction Order excluding continuous-loop type systems that drop callers midstream into a message from the scope of the claims is in error.

5. Plaintiff-Appellant Respectfully Requests this Court to Adopt Its Argument Made to the Lower Court that "When" Means "During the Time"

As explained in detail above, there is no embodiment disclosed in the '374 Patent that starts message playback at the moment a caller is placed on hold. Message playback starts and occurs independently of the caller being placed on hold. Message playback occurs based on the control signals sent from the remote server that command the message playback device to play selected messages of a playlist at designated times so that they will be playing "while the customer is placed on hold and waiting for assistance."[140] As such, Plaintiff-Appellant respectfully requests this Court to construe "when" to mean "during the time." Substituting "during the time" for "when" in the claim term "when a caller is placed on hold," results in the construction: "*during the time a caller is placed on hold.*"[141]

[140] A129, '374 Patent, Col. 1 Lns. 16-19

[141] Plaintiff-Appellant's proposed definition for "when a caller is placed on hold" to the District Court was: "when an outside party to a phone call is placed on hold by a user of an MOH telephone system." A1574. However this definition is based on Info-Hold's isolated definition of the term caller to mean "an outside party to a phone call with the user of an MOH compatible telephone system." *Id.*

C. The District Court Erred in Granting Defendants Summary Judgment of no Induced Infringement

The District Court granted Muzak's summary judgment motion of no inducement against Muzak LLC and Muzak Holdings LLC and dismissing Muzak Holdings LLC from the case.[142] The District Court adopted Muzak's position that Info-Hold had not presented even a "scintilla" of evidence that either Muzak LLC or Muzak Holdings LLC "possessed actual knowledge that the acts they alleged[ly] induced infringed the '374 Patent."[143] The Court then stated "[b]ecause such evidence of actual knowledge is a necessary element of proving induced infringement, no further analysis is necessary and summary judgment is granted on the inducement of infringement claims against both Defendants."[144] The District Court then dismissed Muzak Holdings LLC from the case as inducement was the only claim that remained against Muzak Holdings LLC in this action.[145]

Under *35 U.S.C. § 271(b)*, a party "shall be liable as an infringer" if it "actively induces infringement of a patent." A finding of inducement requires both knowledge of the existence of the patent and "knowledge that the induced acts constitute patent infringement." *Commil USA, LLC v. Cisco Sys.*, 720 F.3d 1361, 1367 (Fed. Cir. 2013) (citing *Global-Tech)* Thus, to support a finding of

[142] A50-60
[143] A59
[144] A60
[145] A58-60

inducement there must be "evidence of culpable conduct, directed to encouraging another's infringement, not merely that the inducer had knowledge of the direct infringer's activities." *DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1306 (Fed. Cir. 2006). A party has the requisite knowledge if, after becoming aware of the existence of the patent, it knew "that the induced acts constitute patent infringement," or it was willfully blind to the infringement. *Global-Tech Appliances, Inc.*, 131 S. Ct. 2060, 2068, 2070 (2011). A party is willfully blind if it believed there was a high probability that the acts constituted patent infringement and took deliberate steps to avoid learning of the infringement. *Id*.

On summary judgment, it is imperative to remain cognizant, as this Court has, that under the law of the circuit, it "must disregard all evidence favorable to the moving party that [a] jury is not required to believe." *White v. Burlington Northern & Santa Fe Ry.*, 364 F.3d 789, 794 (6th Cir. 2004) (citing *Reeves v. Sanderson Plumbing Prods.*, 530 U.S. 133, 151 (U.S. 2000)). When considering the evidence under these constraints and in the light most favorable to Info-Hold, and drawing all justifiable inferences in its favor, Appellant respectfully submits there are genuine issues of material fact that preclude summary judgment on the inducement claims against the Defendants.

1. Info-Hold Corresponded with Muzak on Multiple Occasions Relating to the '374 Patent Prior to Filing the Complaint

As discussed, the '374 Patent is directed to systems and methods for remotely programming message playback devices, containing stored messages, situated at various locations through the use of computers and a communications link.[146] The remotely located message playback devices are specially configured to accommodate and implement command signals containing instructions, which originated from a customer computer and were directed through a server computer to the playback devices via the communications link, such as, *inter alia*, the internet or a satellite link.

In responding to the Defendants' Motion for Partial Summary Judgment, Info-Hold presented the following facts relevant to the inducement claim against Muzak LLC and Muzak Holdings LLC:

- In early 2006, Info-Hold, through its then in-house counsel, Daniel Wood, corresponded with Michael Zendan, Vice President and General Counsel of Muzak, LLC (and also an officer of Muzak Holdings LLC) regarding the '374 Patent.[147]

[146] *See supra* SectionV.B.3.a.i. of this brief, setting forth the facts

[147] A2883-2892, Exhibit I to Info-Hold's Response in Opposition, Bates No. IH008089-008090; A3184-3185, A3192-3193 Info-Hold's Response in Opposition

- In a letter dated February 21, 2006, Dan Wood remarked on the similarities between the ’374 Patent and at least one of Muzak’s products and asked Mr. Zendan to conduct “a detailed analysis of the ’374 Patent” and if there were no potential issues to inform Mr. Wood “directly and explicitly.”[148] Mr Wood specifically stated “the ability to control message selection at remote locations via computer, is a similarity between the referenced devices that Info-Hold feels deserves closer scrutiny.”[149]
- In June of 2006, Mr. Wood and Mr. Zendan have a telephone conversation[150] during which:
    1. Mr. Wood states the “threshold element for us is whether or not you have a system that can remotely control message selection and sequencing at one or more locations…”[151]
    2. Mr. Zendan states “well music, yeah, we have a system where there probably is some control of the music...on a satellite dish. Yeah, absolutely…”[152]

[148] *Id*. at A2890, IH008089
[149] *Id*.
[150] A2812-2867, Exhibit D to Info-Hold’s Response in Opposition to Muzak’s Motion for Partial Summary Judgment on Damages.
[151] *Id.* A2815
[152] *Id.* A2817

3. Mr. Zendan states he would take a closer look at the patent with respect to music and controlling that music.[153]

- In a letter dated June 24, 2006, Mr. Wood reminded Mr. Zendan of his understanding that, as General Counsel for both Muzak entities, he had repeatedly stated that Muzak would "undertake a more thorough review of the patent, with considerations of applications beyond on-hold messaging."[154]
- In the same letter, Mr. Wood urges Mr. Zendan to "accomplish your promise to review Info-Hold's patent claims by obtaining an opinion letter from an intellectual property attorney," and states "Info-Hold feels that nothing short of such letter will satisfy legitimate concerns that each of us has, regarding the scope of the claims and similarity to any products vended by Muzak."[155]
- Mr. Zendan replies to Mr. Wood alleging that Mr. Wood's letter "inaccurately portrays our conversations and response."[156]

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[153] *Id.* A2817-2819 at pages 14-15, 18, 24-25.
[154] A2886-2887, Exhibit I to Info-Hold's Response in Opposition to Muzak's Motion for Partial Summary Judgment on Damages
[155] *Id.*
[156] A2884, Exhibit I to Info-Hold's Response in Opposition to Muzak's Motion for Partial Summary Judgment on Damages, Bates No. IH008089-008090

- Mr. Zendan never provided Mr. Wood, or Info-Hold, with any follow-up analysis of the ’374 Patent with respect to Muzak products, much less obtained an independent opinion of counsel.[157]
- Even in view of these correspondences from, and lengthy discussions with, Info-Hold regarding the ’374 Patent, Muzak continued to market, advertise, and install “programmable on-hold and overhead music and messaging systems that performed the very functions claimed in the ’374 Patent.”[158]
- “Through its marketing and licensing activities, Muzak enables its customers in practicing the claims of the ’374 Patent without authority to do so and ‘aids’ them in their infringement by installing the systems and peripheral apparatus such as speakers, through which the remotely programmed messages are heard by shoppers.”[159]

Info-Hold filed suit against Muzak on May 3, 2011 alleging infringement of the ’374 Patent by Muzak, including Muzak’s LE2 and MV message playback

[157] A3192, Info-Hold’s Response in Opposition to Muzak’s Partial Summary Judgment Motion of Inducement and Dismissing Muzak Holdings LLC from the Case
[158] A3191-3194, A3228-3236, *Id*. at pgs. 8-11, Exhibits G, H and I
[159] *Id*.

systems.[160] The complaint alleged inducement by Muzak LLC and Muzak Holdings LLC.[161]

2. There are Genuine Issues of Material Fact Demonstrating that Muzak had Actual Knowledge of Infringement and/or Was Willfully Blind to the Infringement

The Supreme Court's 2011 *Global Tech* decision changed the standard for showing the "knowledge" required for an inducement claim. 131 S. Ct. at 2068, 2070. Recent federal cases applying the *Global Tech* standard, have held that knowledge of the patent combined with the failure to compare the infringing product to the claims of the patent satisfy the knowledge requirement for inducement. For example, in the case of *Smith & Nephew v Arthrex*, this Court found that there was substantial evidence to support a jury finding of inducement where the infringer knew of the patent, provided instructions that induced acts that infringed the patent, and failed to compare the accused product with the claims of the patent. *Smith & Nephew v Arthrex*, 502 Fed. Appx. 945, 950, 2013 WL 163823, *4-5 (Fed. Cir. Jan. 16, 2013). Similarly, other courts have concluded that evidence of an infringer's knowledge of the patent, and the failure to perform an adequate investigation of potential infringement demonstrated that the defendants had the knowledge required for inducement. *Minemyer v. R-Boc Representatives,*

[160] A1053-1059
[161] *Id.*

Inc., 2012 U.S. Dist. LEXIS 82272 (N.D. Ill. June 13, 2012). The District Court for the Eastern District of Virginia also found that an infringer's knowledge that the patentee was a competitor and evidence showing the infringer's awareness of the patents being previously asserted against others was sufficient to establish inducement under the willful blindness standard. *ePlus Inc. v. Lawson Software, Inc*., 2011 U.S. Dist. LEXIS 114493 (E.D. Va. Oct. 2, 2011).

Based on post-*Global-Tech* precedent, Info-Hold adduced and placed before the District Court compelling direct and circumstantial evidence that both Muzak entities (Muzak LLC and Muzak Holdings LLC) possessed the requisite knowledge of infringement under the inducement standards set forth in *Global Tech* so as to preclude summary judgment on the issue.

Similar to the facts of the cited cases, Info-Hold provided evidence that both Muzak entities were informed about the '347 Patent, failed to compare their accused products with the claims of the patent, and continued to make and sell their accused products after knowledge of the patents. Furthermore, in addition to these facts, counsel for Muzak, Michael Zendan, even told Info-Hold he would undertake a more detailed review of the patent but failed to do so. Additionally, Mood Media, the company that acquired Defendants long before entrance of the summary judgment order at issue, was, in fact, a licensee under the '374 Patent as

the result of previous litigation and a Settlement and Licensing Agreement, which was in evidence in this case. [162]

The evidence presented by Info-Hold demonstrates that despite actual knowledge of the existence of the ’374 Patent and despite targeted correspondence and discussions regarding the scope of the patent in light of certain Muzak products, the defendants evinced a specific intent to aid and encourage its customers and resellers to infringe that very patent by openly advertising, instructing, and otherwise supporting its customers in that direct infringement.

> Evidence of “active steps . . . taken to encourage direct infringement," such as advertising an infringing use or instructing how to engage in an infringing use, show an affirmative intent that the product be used to infringe, and a showing that infringement was encouraged overcomes the law's reluctance to find liability when a defendant merely sells a commercial product suitable for some lawful use.

MGM Studios Inc. v. Grokster, Ltd., 545 U.S. 913, 936 (2005).

This evidence is sufficient to establish, at the least, a genuine issue of material fact regarding the requisite knowledge under the inducement standard. Instead of considering this evidence in the light most favorable to Info-Hold and drawing all justifiable inferences in its favor, the District Court improperly weighed the evidence, made inferences against the nonmoving party, and found on summary judgment that the Muzak entities did not have the requisite knowledge

[162] *See* A2878-9.

for inducement. *Anderson*, 477 U.S. at 251-52, 255; *LidoChem, Inc. v. Stoller Enters.*, 500 Fed. Appx. 373, 378 (6th Cir. 2012). Because the District Court erred in finding there was no genuine issue of fact on the knowledge requirement of the inducement standard, Appellant respectfully requests that this Court vacate and reverse the District Court's Order and to remand the case for further proceedings with Muzak Holdings LLC reinstated as a defendant.

VI. CONCLUSION

The District Court's Order on Claim Construction and its Orders granting Defendants' Motion for Partial Summary Judgment of Info-Hold's Claims of Inducement of Infringement against Muzak Holdings LLC and Muzak LLC and Dismissing Muzak Holdings LLC From the Case and Muzak's Motion for Partial Summary Judgment that Info-Hold is not Entitled to Reasonable Royalty Damages and for Dismissal were entered in error and for the aforementioned reasons, should be vacated and reversed. Similarly, because it was an abuse of discretion, the District Court's Order striking Robert White's reports and testimony cannot stand. Info-Hold respectfully requests this Court for a remand of the case to the district court for further proceedings on the remaining issues.

/s/ James L. Kwak
James L. Kwak
STANDLEY LAW GROUP LLP
6300 Riverside Dr.
Dublin, OH 43017

(614) 792-5555

Counsel for Appellant

ADDENDUM

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UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF OHIO
WESTERN DIVISION

INFO-HOLD, INC.,

Plaintiff,

v.

MUZAK HOLDINGS LLC, *et al.*,

Defendants.

Case No. 1:11-cv-283

Judge Timothy S. Black

ORDER ON CLAIM CONSTRUCTION

The parties have each submitted briefs in support of their proposed claim constructions. (Docs. 40, 41, 46, 47, 48, 52, 55, 57, and 59). Additionally, the Court held a *Markman* hearing on August 10, 2012.

I. THE PATENT AT ISSUE

Plaintiff Info-Hold, Inc. is alleging infringement of United States Patent No. 5,991,374 ("the '374 patent") by Defendants Muzak Holdings LLC and Muzak LLC. The patent survived a 2011 Reexamination Procedure by the United States Patent and Trademark Office as Patent No. 5,991,374 C1 ("the '374 C1 patent").

The '374 patent - titled "*Programmable Messaging System for Controlling Playback of Messages on Remote Music-On-Hold-Compatible Telephone Systems and Other Message Output Devices*" - is generally directed to a system and methods for the remote control of on-hold, overhead, and other message playback devices located at one or more remote locations.

The '374 patent issued with thirty-six claims covering both the system and the method for remotely controlling message playback. While the scope of the claimed invention is disputed between the parties, the claimed invention can be generally summarized as achieving the desired control over messaging by using a computer that is programmed to push control signals to linked remote playback devices. These remote playback devices have a memory on which the various message options have been previously stored, and the ability to manage message playback according to the incoming control signal, and an output through which the chosen message is played. The control signals originating from the computer and pushed out to the remote playback devices contain instructions that include the intended device and the desired message. The designated playback device then plays the desired message.

II. THE CLAIMS AT ISSUE

The disputed claim interpretation revolves around the details associated with the on-hold messaging claims.

The first area of dispute centers around the phrase "when a caller is placed on hold" and the parties have identified six claim terms using that language: (1) "when a caller is placed on hold;" (2) "when callers are placed on hold on the respective telephone systems;" (3) "generating a control signal using said computer for said message playback device corresponding to said selected remote site to play said selected message when a

caller is placed on hold on the respective telephone system; " (4) "storing a library of discrete and individually accessible messages at each of said remote sites for playback on the respective message playback device when a caller is placed on hold;" (5) "for playing selected messages through an input of said message playback device when a caller is placed on hold; and (6) "to provide said accessed message to said output in accordance with said controls signals when a caller is placed on hold."

The second area of dispute concerns individual terms used to describe the functionality of the device, and includes the terms: (7) "computer;" (8) "programmable to;" (9) "control signal;" and (10) "discrete and individually accessible messages."

III. STANDARD OF REVIEW

Claim construction is a matter of law to be decided exclusively by the Court. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71 (Fed. Cir. 1995) (*en banc*), *aff'd*, 517 U.S. 370. "[T]he claims of a patent define the invention to which the patentee is entitled the right to exclude." *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004). In construing claims, the Court determines whether or not a term requires construction. *United States Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997). The Court is not required to accept a construction of a term, even if the parties have stipulated to it, but instead may arrive at its own construction of claim terms, which may differ from the constructions proposed by

the parties. *Pfizer, Inc. v. Teva Pharms., USA, Inc.*, 429 F.3d 1364, 1376 (Fed. Cir. 2005).

Courts must first look to intrinsic evidence (*i.e.*, the claim itself, specifications, prosecution history and prior art cited in the patent) to resolve any ambiguities. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). "The appropriate starting point [...] is always with the language of the asserted claim itself." *Comark Comm, Inv. v. Harris Corp.*, 156 F.3d 1186 (Fed. Cir. 1998). Claim terms are "generally given their ordinary and customary meaning." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005). "The ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective date of the patent application." *Id.* at 1313. Absent an express intent to the contrary, a patentee is presumed to have intended the ordinary meaning of a claim term. *York Prods. v. Cent. Tractor Farm & Family Ctr.*, 99 F.3d 1568, 1572 (Fed. Cir. 1996). Claim terms cannot be narrowed by reference to the written description or prosecution history unless the language of the claims invites reference to those sources. *See, e.g., McCarty v. Lehigh Valley R.R.*, 160 U.S. 110, 116 (1895) ("If we once begin to include elements not mentioned in the claim in order to limit such claim . . ., we should never know where to stop").

The Court must also consider the specification "to determine whether the inventor has used any terms in a manner inconsistent with their ordinary meaning." "When the

specification explains and defines a term used in the claims, without ambiguity or incompleteness, there is no need to search further for the meaning of the term." *Multiform Desiccants, Inc. v. Medzam Ltd.*, 133 F.3d 1473, 1478 (Fed. Cir. 1998).

Finally, the Court may consider "the prosecution history of the patent, if in evidence." *Vitronics,* 90 F.3d at 1582. The prosecution history limits the interpretation of claim terms so as to exclude any interpretation that was disclaimed during prosecution. *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995). The prosecution history "constitutes a public record of the patentee's representations concerning the scope of and meaning of the claims, and competitors are entitled to rely on those representations when ascertaining the degree of lawful conduct." *Seachange Int'l, Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1369 (Fed. Cir. 2005).

In most circumstances, analysis of the intrinsic evidence alone will resolve claim construction disputes. *See Vitronics*, 90 F.3d at 1583. However, if the intrinsic evidence does not resolve ambiguities, extrinsic evidence may be considered. Extrinsic evidence "can shed light on the relevant art,' but is less significant than the intrinsic record in determining the 'legally operative meaning of disputed claim language.'" *C.R. Bard, Inc. v. United States Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004) (*quoting Vanderlande Indus. Nederland BV v. Int'l Trade Comm'n*, 366 F.3d 1311, 1318 (Fed. Cir. 2004)). Dictionaries and technical treaties, which are extrinsic evidence, hold a "special place" and may sometimes be considered along with the intrinsic evidence when determining the ordinary meaning of claim terms. *Id.* at 1267. However, the Federal Circuit cautions

against the use of nonscientific dictionaries, lest dictionary definitions be converted into technical terms of art having legal, not linguistic significance. *Id.*

IV. THE COURT'S CONSTRUCTION OF THE CLAIMS

A. Joint Claim Constructions

The Court adopts the joint claim constructions proposed by the parties in the Joint Claim Construction Chart found at Doc. 40, Ex. B at 2-3.

B. Disputed Terms

1. "When a caller is placed on hold"

The parties dispute the construction of six similar claim phrases relating to the message playback feature of the patented device: (1) "when a caller is placed on hold;" (2) "when callers are placed on hold on the respective telephone systems;" (3) "generating a control signal using said computer for said message playback device corresponding to said selected remote site to play said selected message when a caller is placed on hold on the respective telephone system;" (4) "storing a library of discrete and individually accessible messages at each of said remote sites for playback on the respective message playback device when a caller is placed on hold;" (5) "for playing selected messages through an input of said message playback device when a caller is placed on hold;" and (6) "to provide said accessed message to said output in accordance with said controls signals when a caller is placed on hold." (Doc. 22 at 4-13).

Because terms in a patent must be constructed consistently, the Court will offer one construction for the phrase "when a caller is placed on hold."

The primary dispute between the parties is whether the phrase indicates that message playback takes place *during* the time the caller is placed on hold or whether the playback *starts* when a caller is placed on hold. (Doc. 56 at 9). Plaintiff offers the following claim construction: "to be heard by outside parties to telephone calls who are placed on hold by users of respective MOH telephone systems." Defendants propose the simple construction "when a caller is placed on hold." (Doc. 22 at 7).

Defendant argues that the plain language of the claims refers to a momentary act of placing a caller on hold. Although "when" can mean either a momentary event or "while," Defendant argues that "placing" a caller on hold clearly references a momentary act. (Doc. 56 at 10). The Court agrees that the plain meaning of the claim terms favors a construction of "when" as meaning "at the moment." "Placed" indicates an action that must occur at a specific moment, indicating that the message must begin playing at that moment. Under Plaintiff's proposed construction, the term "placed" would have no meaning, and an interpretation that reads out a claim language or renders it meaningless cannot be correct. *Bicon, Inc. v. Starumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006)

The context of the claim terms confirms this construction. Claim seven requires that messages be accessed, delivered from storage, and played when a caller is placed on hold and also provides the system operator with the option to choose how many times a message is played. (*See* Doc. 40, Ex. A at 46). A message cannot be played until it is accessed; and if a message is only accessed when a caller is placed on hold, then it cannot

already be playing in a continuous loop system.

Finally, the prosecution history also supports the construction of "when" as "at the moment." During reexamination, Plaintiff added the phrase "when a caller is placed on hold" to several claims. (*See* Doc. 40, Ex. A at 46-49). To survive reexamination, Plaintiff argued that the messages were played when the caller is placed on hold, significantly modifying the body of the claims to define the timing of message access and message playback.

Plaintiff disputes this interpretation, offering many rhetorical flourishes and analogies, but little evidence. Plaintiff's principal substantive argument is that the system as understood by a person skilled in the art at the time of the filing would have been a continuous loop system because no other system existed. However, as Plaintiff did not provide any evidence to support this assertion, it must necessarily fail.

Therefore, the Court finds that in each of the six disputed claim terms recited above, the phrase "when a caller is placed on hold" shall be constructed to mean "at the moment a caller is placed on hold."

2. "computer"

Plaintiff proposes that "computer" be constructed as "a programmable electronic device capable of performing data processing functions and having a memory device, an input device, and a display." (Doc. 33 at 11). Defendant argues that this definition goes beyond the core functionality mentioned in the patent and improperly imports additional limitations. (Doc. 40 at 22). Defendant argues against any construction requiring certain

components, and suggests a construction of "a programmable electronic device that receives, processes, and presents data." (*Id.*)

While Defendant admits that the specification does include the required features for some embodiments, Defendant argues that the specification fails to state that the features are required for every embodiment of the claimed invention. (Doc. 40 at 23). However, the Court notes that the specification specifically states that "each client computer comprises a central processing unit, a memory device, a display device, such as a video monitor, and at least one input device, such as a keyboard and preferably also a mouse." (Doc. 55 at 4). Where the specification details the meaning of a "computer," the Court finds that the inventor specifically referenced necessary components of the device.

Accordingly, the Court adopts Plaintiff's proposed claim construction.

3. "programmable to"

Plaintiff proposes that "programmable to" be constructed as "capable of being programmed." In support, Plaintiff argues that "it is axiomatic that a device, programmable to accomplish X, is capable of being programmed to do X." (Doc. 41 at 22). Defendant contends that Plaintiff's proposed construction is too broad, and that it would render all computers and playback devices as infringing regardless of what they are actually programmed to do. (Doc. 40 at 24). Instead, Defendant proposes a construction of "programmed," arguing that the devices must already be programmed to carry out the functionality of the message playback device. (*Id.* at 25).

The Court finds Defendant's argument unpersuasive. Not every computer would

be infringing, because the computer must first have the basic software formatting necessary to enable it to be programmable to perform the claimed functionality (in other words, it must be programmed to be programmable). "Programmable" means just that: "capable of being programmed." Accordingly, the Court adopts Plaintiff's proposed construction.

4. "control signal"

Plaintiff proposes that "control signal" be constructed as:

> A communication, generated by said computer capable of interacting with at least one playback device, containing a command involving the control of playback devices and/or messages.

(Doc. 33 at 4).

Defendant proposes the claim term be constructed as:

> An electronic signal generated by said computer containing instructions for controlling the operation of one or more remote playback devices.

(*Id.*)

Defendant's principal objection to Plaintiff's proposed construction is that Plaintiff's wording is "unnecessarily cumbersome and confusing." (Doc. 40 at 25). Plaintiff responds that the use of the words "communication," "command," and "control" is an attempt to employ words illuminated elsewhere in the claims and specifications. (Doc. 41 at 8).

Given that the parties do not dispute that the proposed constructions have the same meaning, the Court agrees that Defendant's construction is more straightforward, and thus

preferred. *See Control Res., Inc. v. Delta Electronics, Inc.*, 133 F. Supp. 2d 121, 127 (D. Mass 2001) ("The claims must be translated into plain English so that a jury will understand. Thus, accurate words that convey the essence of the invention are needed.").

5. "discrete and individually accessible messages"

At the *Markman* hearing, Defendant submitted that it agrees to Plaintiff's proposed construction for this term. Accordingly, "discrete and individually accessible messages" shall be construed to mean "messages that are individually identifiable and separately accessible."

VI. CONCLUSION

Therefore, the parties shall construe the contested terminology of the '374 patent as set forth in this Order.

IT IS SO ORDERED.

Date: 9/10/12

s/ Timothy S. Black
Timothy S. Black
United States District Judge

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF OHIO
WESTERN DIVISION

INFO-HOLD, INC.,	:	Case No. 1:11-cv-283
	:	
Plaintiff,	:	Judge Timothy S. Black
	:	
vs.	:	
	:	
MUZAK HOLDINGS LLC, *et al.*	:	
	:	
Defendants.	:	

ORDER DENYING DEFENDANTS' MOTION FOR RECONSIDERATION AND DENYING PLAINTIFF'S MOTION FOR RECONSIDERATION (Docs. 61, 63)

On September 10, 2012, thirty days after a Markman hearing, and pursuant to the parties' briefs submitted in support of their proposed claim constructions regarding disputed claims related to United States patent No. 5,991,374, this Court entered its Order on Claim Construction (Doc. 60).

On September 17, 2012, Defendants filed a motion to reconsider the claim construction order related to the term "control signal." (Doc. 61).

On September 27, 2012, Plaintiff filed a motion for clarification, rehearing, or reconsideration of the order on claim construction, specifically contesting the Court's construction of the claim phrase "when a caller is placed on hold." (Doc. 63).

Both motions have now been fully briefed. (Docs. 64, 65, 66, 69).

I. STANDARD OF REVIEW

District courts have authority both under common law and Rule 54(b) to reconsider interlocutory orders and to reopen any part of a case. *Rodriguez v. Tennessee Laborers Health & Welfare Fund*, 89 Fed. Appx. 949, 959 (6th Cir. 2004). Nevertheless, *a fortiori*, "motions for reconsideration are disfavored." *Davie v. Mitchell*, 291 F.Supp.2d 573 (N.D. Ohio 2003). Thus, "courts will [only] find jurisdiction for reconsidering interlocutory orders where there is (1) an intervening change of controlling law; (2) new evidence available; or (3) a need to correct a clear error or prevent manifest injustice." *Louisville/Jefferson County Metro Gov't v. Hotels.com, L.P.*, 590 F.3d 381, 389 (6th Cir. 2009). Here, both parties seek reconsideration "to correct clear error and prevent manifest injustice."

II. ANALYSIS

A. "Control signal"

Defendants seek reconsideration of the claim construction order as it relates to the term "control signal."

Defendants claim that the Court mistakenly relied on Defendants' own originally proposed definition of "control signal" ... "even though this definition was not ultimately espoused by either party." (Doc. 61 at 5). Defendants also claim that the Court's conclusion that "the parties do not dispute that the proposed constructions have the same meaning" (Doc. 60 at 10) was incorrect, insisting that Plaintiff did not agree with Defendants' proposed construction. (Doc. 61 at 6).

To remedy this alleged clear error and prevent manifest injustice, Defendants move the Court to adopt a new construction, as cobbled together, using Plaintiff's original proposal and information from Plaintiff's briefing. (*Id.* at 7).

However, as Plaintiff correctly states in reply: "[t]he Court is not required to accept a construction of a term, even if the parties have stipulated to it, but instead by arrive at its own construction of claim terms, which may differ from constructions proposed by the parties." *Pfizer, Inc. v. Teva Pharms., USA, Inc.* 429 F.3d 1364, 1376 (Fed. Cir. 2005). Moreover, Plaintiff disputes that it significantly disagreed with Defendants' construction of "control signal" and affirms that "[t]he Court rightly recognized the *de minimis* distinction between the parties' proposed constructions." (Doc. 64 at 4).

Upon careful review, the Court finds no evidence of clear error or manifest injustice with regard to its construction of the claim term "control signal."

B. "When a caller is placed on hold"

Plaintiff seeks reconsideration of the Court's construction of the claim phrase "when a caller is placed on hold" and alleges "that the Court erred in not giving full weight to specific references and natural implications contained in the specification." (Doc. 63 at 12-13).

More specifically, Plaintiff alleges that neither the specification nor the likely interpretation of a skilled artisan for whom the patent was written were given proper weight, and, as a result, the Court's reading of the claim phrase is grammatically incorrect,

and that an appropriate construction would indicate that the phrase means that certain functions occur while a caller is on hold, not that the act of placing a caller on hold triggers the functions. (Doc. 69 at 8).

Plaintiff supports these arguments in part by using evidence it alleges would have been presented at a technical tutorial, had such a tutorial taken place. (Doc. 63 at 7).

Despite Plaintiff's assertion that "it is not frivolous or inappropriate to restate and possibly reframe the arguments that the party felt did not receive proper consideration," Defendants are correct in criticizing Plaintiff's use of the same arguments it made in its Markman briefing and oral argument. As Defendants point out, all of Plaintiff's arguments have either already been presented or could have been made earlier. Moreover, Plaintiff's attempt to introduce new arguments and evidence not of record through a hypothetical technical tutorial that has not taken place, is not required by law, and has been repeatedly argued for previously, is likewise inappropriate and unavailing.

Upon careful review, the Court finds no evidence of clear error or resulting manifest injustice with regard to its construction of the claim phrase "when a caller is placed on hold."

III. CONCLUSION

Accordingly, for the reasons stated here, Defendants' motion for reconsideration (Doc. 61) and Plaintiff's motion for reconsideration (Doc. 63) are both **DENIED.**

IT IS SO ORDERED.

Date: November 6, 2012

s/ Timothy S. Black
Timothy S. Black
United States District Judge

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF OHIO
WESTERN DIVISION

INFO-HOLD, INC.,	:	Case No. 1:11-cv-283
	:	
Plaintiff,	:	Judge Timothy S. Black
	:	
vs.	:	
	:	
MUZAK HOLDINGS LLC, *et al.*,	:	
	:	
Defendants.	:	

ORDER THAT PLAINTIFF'S MOTION FOR LEAVE TO FILE FIRST AMENDED AND SUPPLEMENTAL COMPLAINT (Doc. 62) IS DENIED

This civil action is before the Court on Plaintiff's motion to file a first amended and supplemental complaint (Doc. 62) and the parties' responsive memoranda (Docs. 68, 70).

I. BACKGROUND

Plaintiff filed its original complaint in this case on May 3, 2011, more than a year and a half ago. (Doc. 1). Following a scheduling conference, and based on the parties' joint suggestions, the Court issued a Calendar Order, subsequently extended, which included a deadline of November 29, 2011 (almost a full year ago) by which to file motions to amend the pleadings and/or add additional parties. (Doc. 23). Now, almost a year after the deadlines for amendment of pleadings and for service of infringement contentions have passed, and with discovery closing in less than two months, Plaintiff has filed its motion to file a first amended and supplemental complaint.

According to Plaintiff, the purposes of the proposed amended complaint are to accuse a new product, to state sufficient allegations about that product to form the basis for a subsequent motion for preliminary injunction, and to satisfy questions raised by the Defendants regarding allegations contained in the original complaint.

The motion to file the amended complaint is now fully briefed. (Docs. 23, 68, 70).

II. STANDARD OF REVIEW

Under Rule 15(a) of the Federal Rules of Civil Procedure, a plaintiff may amend its pleadings as a matter of course if the amendment is filed within 21 days after service of a 12(b)(6) motion. Fed. R. Civ. P. 15(a)(1)(B). If a plaintiff wishes to file an amended complaint after the 21 day grace period, he is required to seek leave of the court to do so. And Rule 15 provides that "[t]he court should freely give leave when justice so requires." Fed. R. Civ. P. 15(a)(2).

The United States Supreme Court has held that motions for leave to amend should be liberally granted unless the motions are brought in bad faith or the proposed amendments would cause undue delay, be futile, or unfairly prejudice the opposing parties. *Foman v. Davis*, 371 U.S. 178, 182 (1962). "A proposed amendment is futile if the amendment could not withstand a Rule 12(b)(6) motion to dismiss." *Rose v. Hartford Underwriters Ins. Co.*, 203 F.3d 417, 420 (6th Cir. 2000).

Separate and apart from the Rule 15 requirements, however, a party moving for leave to amend its pleadings, after the deadline for such amendments set in the case scheduling order has passed, must show "good cause." Fed. R. Civ. Proc. 16(b)(4). The

"good cause" requirement specifically calls for evidencing good cause for the "failure earlier to seek leave to amend." *Leary v. Daeschner*, 349 F.3d 888, 909 (6th Cir. 2003).

In the final analysis, granting or denying a request to amend a complaint is left to the broad discretion of the district court. *Gen. Electric Co. v. Sargeant & Lundy*, 916 F.2d 1119, 1130 (6th Cir. 1990).

III. ANALYSIS

A. Fed. R. Civ. Proc. 16(b)(4)

As Defendants have pointed out, nearly a year has passed since the deadlines expired for the amendment of pleadings and the service of infringement contentions, and discovery will close in less than two months. As a result, the inquiry into whether Plaintiff can demonstrate good cause, as required by Rule 16(b)(4), for its failure to move to amend the pleadings earlier, is an important one. However, Plaintiff's motion does not even address the "good cause" standard of Fed. R. Civ. Proc. 16(b)(4), and Plaintiff makes little attempt to meet it, even in its reply brief. (Doc. 70). Plaintiff makes little attempt to answer: (1) when it first learned of the new allegedly infringing products or the new facts it now seeks to add; (2) why moving almost a year past the deadline for amending the pleadings does not constitute undue delay in this case; and (3) why this amendment will not prejudice the Defendants. Specifically, although the new product that Plaintiff now seeks to challenge was introduced into the market in late March or early April 2012, Plaintiff offers no justification to the Court for Plaintiff having waited until now to move to add the product to its claims.

B. Fed. R. Civ Proc. 15(a)

To be granted leave to amend under Rule 15(a), a plaintiff must demonstrate that its motion is not unduly delayed, will not prejudice the opposing party, and does not propose futile amendments.

Here, as discussed *supra*, Plaintiff has not sufficiently justified the lateness of its motion. Plaintiff's motion and proposed first amended complaint do not rely on new facts obtained through discovery. The facts Plaintiff proposes to add in its amended complaint were known to it when it filed its original complaint. Moreover, Plaintiff has been aware of the product line it seeks to add in its amended complaint since before the deadline to amend the pleadings. (Doc. 68 at 5; Doc. 70 at 1). And, according to Plaintiff, Plaintiff itself informed Defendants of the patent. (Doc. 68-2). In this context, it is difficult to classify this unexplained attempt to amend the pleadings - almost a year late, after the Court's claim construction, and less than two months prior to the close of discovery -, and to add facts that the Plaintiff should have known when it made its Local Patent Rule 103.2 disclosures, as anything other than "undue delay."

As noted, the discovery deadline is fast approaching. The *Markman* phase of the case is complete, and the contours of the action as a whole have been established for many months by Plaintiff's Local Patent Rule 103.2 disclosures and the parties' subsequent narrowing of disputed terms.[1] Moreover, Plaintiff failed to file its motion to

---

[1] Early in a case, Local Patent Rule 103.2 requires patentees to identify all acts they contend relate to infringement. A patentee should not be permitted to utilize belated amendment of pleadings to introduce facts relating to its infringement theories that the patentee was required to allege in its initial Local Patent Rule 103.2 disclosures (in this case, nearly a year ago).

amend until the day after Defendants' Rule 30(b)(6) deposition of Plaintiff, and, accordingly, the granting of the motion to amend will likely require the retaking of that deposition and may well require new and further claim construction by the Court to address new claims being asserted by Plaintiff. All of this creates the very real likelihood of very substantial delays to the final resolution of this case. Such delay is a significant prejudice to Defendants ... and to the Plaintiff.

Moreover, Plaintiff states its allegations of infringement with regard to the new product "on information and belief." (Doc. 62-1). However, as the Supreme Court has expressly provided, a plaintiff must make "more than an unadorned, the-defendant-unlawfully-harmed-me accusation." *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009). Conclusory allegations, without more, fail to meet the pleading standards. *Bell Atlantic Corp. v. Twombley*, 550 U.S. 544, 570 (2007); *Iqbal*, 556 U.S. 662 (2009). Under the circumstances here, Plaintiff's proposed new allegations do not meet the requirements of Fed. R. Civ. Proc. 8, and likely do not rise to the level of plausibility required by *Twombley* and *Iqbal,* especially as to Counts 9 and 10 with respect to the MBOX4. The proposed amendments, as currently drafted, are therefore likely futile.

C. Fed. R. Civ. Proc. 15(d)

Finally, although Plaintiff requests that its motion be granted under Rule 15(d) "to the extent necessary," as Defendants properly point out, Plaintiff does not identify nor discuss what part of its proposed amended pleading it would have the Court regard as supplemental under Rule 15(d).

IV. CONCLUSION

Accordingly, for the reasons stated here, Plaintiff's motion for leave to file a first amended and supplemental complaint (Doc. 62) is hereby **DENIED**.

IT IS SO ORDERED.

Date: November 14, 2012

s/ Timothy S. Black
Timothy S. Black
United States District Judge

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF OHIO
WESTERN DIVISION

INFO-HOLD, INC. Plaintiff, v. MUZAK HOLDINGS LLC AND MUZAK LLC, Defendants.	Civil Action No. 1:11-cv-283 District Judge Timothy S. Black Magistrate Judge Karen L. Litkovitz

STIPULATION OF JUDGMENT OF NON-INFRINGEMENT OF '374 PATENT CLAIMS 7-11, 14-18, 20-22, 26-29, 37 AND 38

WHEREAS Plaintiff Info-Hold, LLC ("Info-Hold") has alleged in this action that Muzak Holdings LLC and Muzak LLC both infringe claims 3, 6-11, 13-22, 24, 26-29, 37 and38 of U.S. Patent No. 5, 991,374 ("the '374 Patent");

WHEREAS in its October 10, 2012, Order on Claim Construction (Dkt. No. 60), the Court construed the term "when a caller is placed on hold" to mean "at the moment a caller is placed on hold," and subsequently denied Info-Hold's request for reconsideration of this construction on November 6, 2012 (Dkt. No. 74);

WHEREAS the term "when a caller is placed on hold" appears in independent claims 7, 17, 22, 26 and 37 of the '374 Patent;

WHEREAS, in response to requests for admissions (Exh. A hereto), Info-Hold admitted that neither Muzak LLC and nor Muzak Holdings LLC infringes independent claims 7, 17, 22, 26 and 37 of the '374 Patent, either directly or indirectly, under the Court's construction of "when a caller is placed on hold" as set forth in Dkt. No. 60;

WHEREAS the term "when a caller is placed on hold" is incorporated into claims 8-12 and 14-16, which depend from independent claim 7, claims 18, 20 and 21, which depend from independent claim 17, unasserted claim 23, which depends from independent claim 22, claims 27

and 28 which depend from independent claim 26, and claim 38, which depends from independent claim 37;

WHEREAS Muzak LLC and Muzak Holdings LLC cannot infringe a dependent claim if they do not infringe the independent claim upon which that dependent claim depends; and

WHEREAS Info-Hold agrees to the entry of judgment of non-infringement of claims 7-11, 14-18, 20-22, 26-29, 37 and 38 of the '374 Patent, based upon the Court's construction of "when a caller is placed on hold," but reserves its right to appeal the Court's construction of "when a caller is placed upon hold."

IT IS HEREBY **STIPULATED AND AGREED** between plaintiff INFO-HOLD, INC., and Defendants MUZAK LLC and MUZAK HOLDINGS LLC, that the Court enter judgment as follows:

1. Based upon the Court's Order on Claim Construction dated October 10, 2012 (Dkt. No. 60), and Exhibit A hereto, the Court declares that Muzak Holdings LLC and Muzak LLC do not infringe claims 7-11, 14-18, 20-22, 26-29, 37 and 38 of the '374 Patent, either directly or indirectly.

2. Based upon the Court's Order on Claim Construction dated October 10, 2012 (Dkt. No. 60), Info-Hold's Complaint herein, to the extent it claims infringement by Muzak Holdings LLC and Muzak LLC of claims 7-11, 14-18, 20-22, 26-29, 37 and 38 of the '374 Patent, is dismissed **with** prejudice.

3. Based upon the Court's Order on Claim Construction dated October 10, 2012 (Dkt. No. 60), Muzak Holdings LLC and Muzak LLC's counterclaims herein, to the extent they request a declaratory judgment that claims 7-11, 14-18, 20-22, 26-29, 37 and 38 of the '374 Patent are invalid or unenforceable, are dismissed **without** prejudice.

4. Nothing in this Stipulation shall affect Info-Hold's right to appeal the Court's construction of "when a caller is placed on hold."

IT IS SO ORDERED:

November 27, 2012

Timothy S. Black
Hon. Timothy S. Black
United States District Judge

Dated: November 26, 2012

INFO-HOLD, INC.

By: /s/ Daniel J. Wood by Barry Bretschneider per email authorization

Daniel Joseph Wood
4120 Airport Road
Cincinnati, OH 45226
danw@info-hold.com
Attorney for Plaintiff Info-Hold, Inc.

Dated: November 26, 2012

MUZAK HOLDINGS LLC AND MUZAK LLC

By: /s/ Kevin W. Kirsch

Kevin W. Kirsch (0081996)
John F. Bennett (0074506)
BAKER & HOSTETLER LLP
312 Walnut Street, Suite 3200
Cincinnati, Ohio 45202-4074
Telephone: (513) 929-3499
Facsimile: (513) 929-0303
jkirsch@bakerlaw.com
jbennett@bakerlaw.com

Barry E. Bretschneider
John P. Corrado
Michael E. Anderson
Charles C. Carson
BAKER & HOSTETLER LLP
1050 Connecticut Ave., N.W.
Suite 1100
Washington, DC 20036-5304
Telephone: (202) 861-1500
Facsimile: (202) 861-1783
bbretschneider@bakerlaw.com
jcorrado@bakerlaw.com
meanderson@bakerlaw.com
Attorneys for Defendants Muzak Holdings LLC and Muzak LLC

CERTIFICATE OF SERVICE

I certify that on November 26, 2012, the foregoing was electronically filed with the Clerk of Court using the CM/ECF system, which will automatically send email notification of such filing to counsel of record, and I also served the foregoing via electronic mail to the following:

Daniel Joseph Wood, Esq.
4120 Airport Road
Cincinnati, OH 45226
danw@info-hold.com

David Wagner, Esq.
423 Reading Road
Mason, OH 45040
wagner.david87@yahoo.com

Christopher M. Alexander, Esq.
Alexander Law Co., LPA
423 Reading Road
Mason, OH 45040
Chris@ChrisAlexanderLaw.com

/s/ John Bennett
John Bennett

EXHIBIT A

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF OHIO
WESTERN DIVISION

INFO-HOLD, INC.,

Plaintiff,

v.

MUZAK HOLDINGS LLC AND
MUZAK LLC,

Defendants.

Civil Action No. 1:11-cv-283

Judge Michael R. Barrett

Magistrate Judge Karen L. Litkovitz

PLAINTIFF'S UPDATED RESPONSES TO DEFENDANTS' SECOND SET OF REQUESTS FOR ADMISSION

Plaintiff, Info-Hold, Inc. ("Info-Hold"), submits the following updated responses to Defendants' Second Set of Requests for Admission. As noted in Plaintiff's Responses, the Court's construction of the claim phrase "when a caller is placed on hold" is the subject of a pending Motion for Reconsideration. Plaintiff reserves the right to amend its responses subject to the Court's ruling on the pending Motion.

RESPONSES

> **Request for Admission No. 15**: Admit that under the Court's construction of "when a caller is placed on hold" in the Order on Claim Construction (Dkt. No. 60), defendants do not infringe claim 7 of the '374 patent, directly or indirectly.

RESPONSE: Admit Subject to the pending Motion for Reconsideration of the Court's construction of the claim phrase, "when a caller is placed on hold."

> **Request for Admission No. 16**: Admit that under the Court's construction of "when a caller is placed on hold" in the Order on Claim

Construction (Dkt. No. 60), defendants do not infringe claim 17 of the '374 patent, directly or indirectly.

RESPONSE: **Admit** Subject to the pending Motion for Reconsideration of the Court's construction of the claim phrase, "when a caller is placed on hold."

Request for Admission No. 17: Admit that under the Court's construction of "when a caller is placed on hold" in the Order on Claim Construction (Dkt. No. 60), defendants do not infringe claim 22 of the '374 patent, directly or indirectly.

RESPONSE: **Admit** Subject to the pending Motion for Reconsideration of the Court's construction of the claim phrase, "when a caller is placed on hold."

Request for Admission No. 18: Admit that under the Court's construction of "when a caller is placed on hold" in the Order on Claim Construction (Dkt. No. 60), defendants do not infringe claim 26 of the '374 patent, directly or indirectly.

RESPONSE: **Admit** Subject to the pending Motion for Reconsideration of the Court's construction of the claim phrase, "when a caller is placed on hold."

Request for Admission No. 19: Admit that under the Court's construction of "when a caller is placed on hold" in the Order on Claim Construction (Dkt. No. 60), defendants do not infringe claim 28 of the '374 patent, directly or indirectly.

RESPONSE: **Admit** Subject to the pending Motion for Reconsideration of the Court's construction of the claim phrase, "when a caller is placed on hold."

Request for Admission No. 20: Admit that under the Court's construction of "when a caller is placed on hold" in the Order on Claim Construction (Dkt. No. 60), defendants do not infringe claim 37 of the '374 patent, directly or indirectly.

RESPONSE: **Admit** Subject to the pending Motion for Reconsideration of the Court's construction of the claim phrase, "when a caller is placed on hold."

Dated: November 2, 2012

/s/ Daniel J. Wood

Daniel J. Wood (0037632)
4120 Airport Road
Cincinnati, Ohio 45226
Telephone: (513) 248-5600
Facsimile: (513) 248-5609
danw@infohold.com

Counsel for Plaintiff
Info-Hold, Inc.

CERTIFICATE OF SERVICE

I certify that on November 2, 2012, the foregoing was served via electronic mail to the following:

John F. Bennett
Kevin W. Kirsch
M. Scott McIntyre
Baker & Hostetler LLP
312 Walnut Street, Suite 3200
Cincinnati, Ohio 45202-4074
jbennett@bakerlaw.com
kkirsch@bakerlaw.com
smcintyre@bakerlaw.com

Barry E. Bretschneider
John P. Corrado
Michael E. Anderson
Baker & Hostetler LLP
Washington Square, Suite 1100
1050 Connecticut Avenue, N.W.
Washington, D.C. 20036-5304
bbretschneider@bakerlaw.com
jcorrado@bakerlaw.com
meanderson@bakerlaw.com

/s/ Daniel J. Wood
Daniel J. Wood

PAGES BETWEEN 32 AND 60 OF THIS ADDENDUM HAVE BEEN EXCLUDED BECAUSE DOCUMENTS ON THESE PAGES WERE FILED UNDER SEAL BY THE DISTRICT COURT

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF OHIO
WESTERN DIVISION

INFO-HOLD, INC.,
Plaintiff,

vs.

MUZAK HOLDINGS LLC, *et al.*,
Defendants.

Case No. 1:11-cv-283

Judge Timothy S. Black

ORDER GRANTING DEFENDANT'S MOTION FOR PARTIAL SUMMARY JUDGMENT THAT PLAINTIFF INFO-HOLD IS NOT ENTITLED TO INJUNCTIVE RELIEF (Doc. 115)

This civil action is before the Court on Defendant's Motion for Partial Summary Judgment that Plaintiff Info-Hold is Not Entitled to Injunctive Relief (Doc. 115) and the parties' responsive memoranda (Docs. 130 and 131).

For an injunction to issue, the party requesting injunctive relief must show that: (1) it has suffered an irreparable injury; (2) legal remedies, such as money damages, are inadequate compensation; (3) the balance of hardships warrants an injunction; and (4) the public interest would not be disserved by an injunction. *eBay Inc. v. MercExchange, LLC*, 547 U.S. 388, 391 (2006) (emphasis added). Here, Joey Hazenfeld, Plaintiff's CEO, admitted in his deposition that any hardship to Plaintiff caused by the alleged infringement at issue in this suit can be remedied through an award of money damages. (Doc. 117 at 2). Plaintiff therefore has no basis upon which to seek an injunction because it cannot demonstrate prong 2 of the *eBay* test.

Furthermore, in its responsive memorandum, Plaintiff withdraws any claim for injunctive relief and asserts that it will not pursue an injunction "either by Motion or Prayer for Relief." (Doc. 130 at 1). Thus, summary judgment is also appropriate to reflect Plaintiff's abandonment of its prayer for injunctive relief.

For the reasons stated, Defendant's Motion for Partial Summary Judgment that Plaintiff Info-Hold is Not Entitled to Injunctive Relief (Doc. 115) is **GRANTED**.

IT IS SO ORDERED.

Date: March 4, 2013

s/ Timothy S. Black
Timothy S. Black
United States District Judge

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF OHIO
WESTERN DIVISION

INFO-HOLD, INC.,	:	Case No. 1:11-cv-283
	:	
Plaintiff,	:	Judge Timothy S. Black
	:	
vs.	:	
	:	
MUZAK LLC,	:	
	:	
Defendant.	:	

ORDER GRANTING DEFENDANT'S MOTION FOR PARTIAL SUMMARY JUDGMENT THAT PLAINTIFF INFO-HOLD IS NOT ENTITLED TO LOST PROFITS DAMAGES (Doc. 116)

This civil action is before the Court on Defendant's Motion for Partial Summary Judgment that Plaintiff Info-Hold is Not Entitled to Lost Profits Damages (Doc. 116) and the parties' responsive memoranda (Docs. 129 and 140).

I. BACKGROUND

Plaintiff Info-Hold, Inc. brings this patent infringement suit against Muzak LLC accusing it of direct infringement, contributory infringement, and induced infringement of U.S. Patent No. 5,991,374 (the '374 patent).

Defendant now moves for entry of partial summary judgment that Plaintiff is not entitled to lost profits as a measure of damages against Defendant in this action on the bases that Plaintiff failed to respond to discovery requests on lost profits and that Plaintiff has provided no evidence of having a method to determine its own gross and net profit margins on products covered by the '374 patent. (Doc. 116).

II. STANDARD OF REVIEW

A motion for summary judgment should be granted if the evidence submitted to the Court demonstrates that there is no genuine issue as to any material fact, and that the movant is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(c). *See Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986); *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 247-48 (1986). A moving party is entitled to point to a lack of evidence to support the facts its opponent must prove to carry its burden of proof as a basis for summary judgment. *Celotex*, 477 U.S. at 325.

The moving party has the burden of showing the absence of genuine disputes over facts which, under the substantive law governing the issue, might affect the outcome of the action. *Id.* at 323. All facts and inferences must be construed in a light most favorable to the party opposing the motion. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986).

A party opposing a motion for summary judgment "may not rest upon the mere allegations or denials of his pleading, but . . . must set forth specific facts showing that there is a genuine issue for trial." *Anderson, supra*, 477 U.S. at 248. It is not sufficient for the nonmoving party to merely "show that there is some metaphysical doubt as to the material facts." *Street v. J.C. Bradford & Co.*, 886 F.2d 1472, 1479 (6th Cir. 1989) (quoting *Matsushita*, *supra*, 475 U.S. at 586). Instead, the nonmoving party must show that "the evidence presents a sufficient disagreement to require submission to a jury."

Griffin v. Hardrick, 604 F.3d 949, 953 (6th Cir. 2010) (citing *Anderson, supra*, 477 U.S. at 252-52).

III. ANALYSIS

A. Lost Profits: The *Panduit* Test

Plaintiff claims it is entitled to lost profits as a measure of damages in this action based on the four-factor *Panduit* test. *Panduit Corp. v. Stahlin Bros. Fibre Works, Inc.*, 575 F.2d 1152, 1156 (6th Cir. 1978). This test requires Plaintiff to show: (1) demand for the patented product; (2) absence of acceptable non-infringing substitutes; (3) manufacturing and marketing capability to exploit the demand; and (4) the amount of profit that would have been made. *Id.* In order to show the profit it would have made in the absence of the alleged infringement, Plaintiff must present enough evidence of the profits that it earned as a result of the technology covered by the '374 patent to satisfy its burden of proof on this issue. However, Plaintiff fails to do so for two reasons.

First, Plaintiff's Rule 30(b)(6) designee, Mr. Mason, testified that Plaintiff's profit information is reflected only on its tax returns, which do not break out profit earned on the Info-Link product separately from other products and services. (Doc. 140 at 9). Mr. Mason also testified that Plaintiff does not keep records of what proportion of its sales is attributable to products covered by the '374 patent. (*Id.*) Mr. Mason was repeatedly asked to clarify and confirm his answers and did not hesitate or express any uncertainty. (*Id.*) Now, in the throes of summary judgment proceedings, Plaintiff cannot generate an

issue of material fact by negating testimony of its Rule 30(b)(6) witness, which was given under oath in this action. *Farrel v. Auto Club of Mich.*, 870 F.2d 1129, 1131-32 (6th Cir. 1989).

Secondly, although Plaintiff conclusorily alleges that it has evidence of lost profits, Plaintiff does not submit that evidence to the Court. Plaintiff cites to a single-page document that it alleges demonstrates its lost profits, but Plaintiff does not make this document of record before the Court, much less explain how it demonstrates that Plaintiff's lost profits claim has merit. Fed. R. Civ. P. 56(c)(1) requires that a party asserting that a fact cannot be or is genuinely disputed, as Plaintiff is, "*must* support the assertion by: (A) citing to particular materials *in the record* . . . ; or (B) showing that the materials cited do not establish the presence or absence of a genuine dispute . . ." (emphasis added). Plaintiff has failed to do so.

Moreover, given that Plaintiff's own expert does not rely on the document in question to set forth Plaintiff's case for lost profits, and given that the document was not produced during fact discovery, Plaintiff is not well situated to argue that the document is sufficient to overcome Defendant's motion for summary judgment.

Plaintiff's arguments regarding lost profits are nothing more than unsupported allegations that fail to raise an issue of material fact sufficient to survive summary judgment. Attorney argument is not evidence. *Duha v. Agrium, Inc.*, 448 F.3d 867, 879 (6th Cir. 2006) ("Arguments in parties' briefs are not evidence.")

Accordingly, Plaintiff has failed to provide evidence that it has any way of calculating or proving the amount of profit it would have enjoyed but for Defendant's alleged infringement, and, therefore, Plaintiff is not entitled to lost profits damages.

B. Failure to Respond to Requests for Admission

Furthermore, regardless of the foregoing analysis, Plaintiff's failure to timely respond to Defendant's Third Set of Requests for Admission alone is sufficient basis on which to grant summary judgment to Defendant.

On November 1, 2012, Defendant served its Third Set of Requests for Admission (21-25). (Doc. 140 at 3). The requests were served by Barry Bretschneider, counsel for Defendant, via electronic mail on Daniel Wood, David Wagner and Christopher Alexander, counsel for Plaintiff. (*Id.*) Under Fed. R. Civ. P. 36 and 6(d), Plaintiff's responses to Defendants' Requests for Admission were due on December 6, 2012, yet Plaintiff failed to respond until February 19, 2013. (Doc. 140 at 3). *See* Fed. R. Civ. P. 36(a)(3) (30 days to respond); Fed. R. Civ. P. 6(d) (three additional days for service by electronic means).

Under Rule 36, Plaintiff's failure to timely serve a response to Defendants' Third Set of Requests for Admission renders admitted all requests stated therein. *See* Fed. R. Civ. P. 36(a)(3) ("A matter is admitted unless, within 30 days after being served, the party to whom the request is directed serves on the requesting party a written answer or objection addressed to the matter and signed by the party or its attorney.").

Plaintiff's failure to timely respond results in the admission of the following statement:

> 21. Info-Hold is not entitled to lost profits as a measure of damages for infringement of the '374 Patent by Muzak.

(Doc. 140 at 4).

Defendants' unanswered requests for admission are binding admissions for purposes of this action. *See, e.g., Tracy v. Heffron*, 822 F.2d 60, 60-61 (6th Cir. 1987) ("The district court correctly deemed the requests for admissions to have been admitted by plaintiff because he did not respond to them pursuant to Rule 36(a), Federal Rules of Civil Procedure."). *See also Luick v. Graybar Electric Co., Inc.*, 473 F.2d 1360, 1362 (8th Cir. 1973).

Plaintiff's excuse regarding the possible failing of its computer systems is unavailing as Fed R. Civ. P. 5(b)(2)(E) renders service by electronic means "not effective if the serving party learns that it did not reach the person to be served." As Plaintiff's failure to respond to the requests in question has already been at issue in this case, and because Plaintiffs eventually did respond on February 19, 2013, Plaintiff has clearly been aware of this failure well more than a month before it finally responded, out of time.

V. CONCLUSION

Accordingly, for the reasons stated, Defendant's Motion for Partial Summary Judgment that Plaintiff Info-Hold is Not Entitled to Lost Profits Damages (Doc. 116) is **GRANTED**.

IT IS SO ORDERED.

Date: March 8, 2013

s/ Timothy S. Black
Timothy S. Black
United States District Judge

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF OHIO
WESTERN DIVISION

INFO-HOLD, INC.,	:	Case No. 1:11-cv-283
	:	
Plaintiff,	:	Judge Timothy S. Black
	:	
vs.	:	
	:	
MUZAK LLC,	:	
	:	
Defendant.	:	

ORDER DENYING PLAINTIFF'S MOTIONS FOR RECONSIDERATION
(Docs. 153 and 168)

This civil action is before the Court on Plaintiff's Second Supplemental Motion for Partial Reconsideration of the Court's Order Granting Defendants' Motion for Partial Summary Judgment on Info-Hold's Claims of Inducement of Infringement Against Muzak Holdings LLC and Muzak LLC and Dismissing Muzak Holdings LLC from the Case (Doc. 153), Plaintiff's Motion for Partial Reconsideration of the Court's Order on Defendant's Motion for Partial Summary Judgment on Lost Profits Damages (Doc. 168), and the parties' responsive memoranda (Docs. 159, 169, 173, and 182).

ANALYSIS

Motions for reconsideration "may not be used to relitigate old matters, or to raise arguments or present evidence that could have been raised prior to the entry of judgment." *Exxon Shipping Co. v. Baker*, 544 U.S. 471, 485 n. 5 (2008) (quoting 11. C. Wright & A. Miller, *Federal Practice and Procedure*, § 2810.1, at 127-28 (2d ed. 1995)).

Thus, "courts will [only] find jurisdiction for reconsidering interlocutory orders where there is (1) an intervening change of controlling law; (2) new evidence available; or (3) a need to correct a clear error or prevent manifest injustice." *Louisville/Jefferson County Metro Gov't v. Hotels.com, L.P.*, 590 F.3d 381, 389 (6th Cir. 2009).

A. Plaintiff's Second Supplemental Motion for Partial Reconsideration of the Court's Order Granting Defendants' Motion for Partial Summary Judgment on Info-Hold's Claims of Inducement of Infringement Against Muzak Holdings LLC and Muzak LLC and Dismissing Muzak Holdings LLC from the Case

Plaintiff argues the Court should reconsider its decision granting partial summary judgment as to the claim of inducement of infringement to correct clear error or prevent manifest injustice. (Doc. 153 at 2). Plaintiff alleges that "comparing the facts and circumstances, pre- and post-filing [of the Complaint], reveals it is clear error to leave the Court's ruling in tact [*sic*] and not modified to comport with present circumstances." *Id.*

However, Plaintiff points to no clear error in the Court's decision as based on the summary judgment record before the Court at the time of the decision. Defendant's motion for summary judgment on inducement of infringement was filed 19 months after the Complaint in this action was filed. All of the post-filing actions that Plaintiff now claims were germane to the Court's decision took place more than a year prior to the filing of Defendant's motion. Nothing prevented Plaintiff from bringing up in its opposition to Defendant's motion for summary judgment the post-filing circumstances.

Plaintiff has not shown that the "manifest justice" it alleges is the result of anything other than its own failure to respond to Defendant's motion in a timely and complete manner.

Moreover, Plaintiff's motion fails to address this Court's stated basis for granting Defendant's motion for partial summary judgment. The basis on which the Court granted Defendant's motion for summary judgment was that Plaintiff failed to present any evidence that Defendant Muzak LLC or former Defendant Muzak Holdings LLC *actually knew* its customers or resellers were infringing Plaintiff's patent. Plaintiff's instant motion does not address the true basis for the Court's decision and does not remedy or explain Plaintiff's failure to present any evidence with its original opposition to Defendant's motion for partial summary judgment that either Defendant Muzak LLC or former Defendant Muzak Holdings LLC actually knew that Muzak customers and resellers were infringing the '374 patent as required by *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060, 2068 (2011).

As a result, Plaintiff's motion for reconsideration is unavailing.

B. Plaintiff's Motion for Partial Reconsideration of the Court's Order on Defendant's Motion for Partial Summary Judgment on Lost Profits Damages

Plaintiff also argues that the Court should revisit its decision granting partial summary judgment of no lost profits damages to consider evidence that allegedly was not available when it filed its opposition and thereby to prevent manifest injustice. (Doc.168 at 2).

As a preliminary matter, Plaintiff's motion does not address the Court's explicit alternative holding that "regardless of the foregoing analysis, Plaintiff's failure to timely respond to Defendant's Third Set of Requests for Admission alone is sufficient basis on which to grant summary judgment to Defendant." (Doc. 141 at 5). Without addressing this alternative ground for summary judgment, Plaintiff cannot show why the request that the Court revisit its grant of summary judgment of no lost profits damages should be considered on the merits at all.

Furthermore, however, even if Plaintiff's request for reconsideration is considered on the merits, it fails. As with its prior motion for reconsideration, Plaintiff must show that the arguments presented were arguments it had made before that were somehow overlooked or not considered by the Court in its original decision, or that the Court should consider new evidence that, with reasonable diligence, could not have been discovered in time to oppose Defendant's motion for partial summary judgment. *See Louisville/Jefferson*, 590 F.3d at 388.

Plaintiff makes no such showing. None of the arguments presented in Plaintiff's motion for reconsideration are based on a change in the law since the Court's original decision, nor is there anything in the motion to suggest that the Court somehow overlooked or misunderstood arguments Plaintiff actually made in its original opposition. What Plaintiff appears to be arguing is that it should get another chance to present arguments and evidence it wishes it had presented in its opposition to Defendant's motion

for partial summary judgment, but did not. Plaintiff does not suggest, and has no basis for suggesting, that somehow the Court unjustly deprived it of the right to present a full opposition to Defendant's original motion for partial summary judgment of no lost profits damages.

Plaintiff's position is based in part on a fundamental misconception: that "[t]his motion for reconsideration is of a piece with the modifications made by the Court regarding Plaintiff's experts and their access to Attorney Eyes Only ('AEO') material." (Doc. 168 at 2). This argument overlooks the problem identified by the Court with Plaintiff's opposition to Defendant's original summary judgment motion, that Plaintiff could not produce evidence of its own profits that were allegedly lost because of Defendant's allegedly infringing sales. (Doc. 141 at 3-5). Plaintiff's access to Defendant's AEO information is irrelevant to the issue of Plaintiff's own lost profits, an issue concerned solely with information that would have been in Plaintiff's possession all along and was not made of record under Fed. R. Civ. P. 56(c)(1) in opposition to Defendant's motion.

Plaintiff suggests that the timing of the Court's conference with counsel that resulted in Plaintiff's damages expert's gaining access to Defendant's AEO documents somehow made "exhibits, calculations and conclusions" not available to be filed with Plaintiff's opposition. In reality, Plaintiff had 11 days between the time its expert gained access to Defendant's AEO documents and the date on which it was required to respond

to Defendant's summary judgment motion. Additionally, Plaintiff could easily have filed a motion for additional time to prepare responsive declarations under Fed. R. Civ. P. 56(d) if more time was needed. Moreover, the "exhibits, calculations and conclusions" Info-Hold says it needed to show lost profits were its own documents, not Defendant's. The timing of Plaintiff's expert's access to Defendant's AEO documents has no bearing on the appropriateness of reconsideration in this instance.

Plaintiff also argues that IH007441, a document alleged to be probative of Plaintiff's lost profits, was produced during fact discovery. As the fact discovery cut-off was December 10, 2012, Plaintiff's argument therefore represents to the Court that IH007441 was in existence at least as early as that date, more than two months before the deadline for Plaintiff's opposition to the summary judgment motion in question. If that be true, Plaintiff had absolutely no excuse for not making it of record as part of its summary judgment opposition filed February 19, 2013. Plaintiff has still not overcome the fact that the Court granted Defendant's motion in part because Plaintiff did not put IH07441 "in the record" as required by Fed. R. Civ. P. 56(c)(1). (Doc. 141 at 4). Nevertheless, even if IH007441 were actually before the Court, it would still be unauthenticated and inadmissible. If IH007441 *had* been presented to the Court as part of Plaintiff's opposition to the summary judgment motion, Defendant would have been able to successfully object to it pursuant to Fed. R. Civ. P 56(c)(2).

Finally, Plaintiff's motion for reconsideration does not explain why or how the evidence it proffers with its motion leads to the conclusion that the Court's decision granting summary judgment of no lost profits damages was clearly in error or manifestly unjust. Plaintiff still has not explained how or why the alleged new evidence it submits demonstrates the existence of genuine issues of material fact as to Plaintiff's entitlement to lost profits damages. As stated in the Court's original Order, Plaintiff's own Rule 30(b)(6) designee gave testimony binding on Plaintiff that it had no documents showing the profits it would have made on sales of products embodying the asserted claims of the '374 patent but for Defendant's alleged infringement. (Doc. 141 at 3-4). Plaintiff's motion completely fails to address this point.

As a result, this motion for reconsideration is unavailing as well.

CONCLUSION

For the reasons stated, Plaintiff Info-Hold's Second Supplemental Motion for Partial Reconsideration of Court's Order Granting Defendants' Motion for Partial Summary Judgment on Info-Hold's Claims of Inducement of Infringement Against Muzak Holdings LLC and Muzak LLC and Dismissing Muzak Holdings LLC from the Case (Doc. 153) and Plaintiff's Motion for Partial Reconsideration of the Court's Order on Defendant's Motion for Partial Summary Judgment on Lost Profits Damages (Doc. 168) are hereby **DENIED**.

IT IS SO ORDERED.

Date: August 20, 2013

s/ Timothy S. Black
Timothy S. Black
United States District Judge

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF OHIO
WESTERN DIVISION

INFO-HOLD, INC.,	:	Case No. 1:11-cv-283
	:	
Plaintiff,	:	Judge Timothy S. Black
	:	
vs.	:	
	:	
MUZAK LLC,	:	
	:	
Defendant.	:	

ORDER:

GRANTING DEFENDANT'S MOTION TO STRIKE THE EXPERT REPORTS OF ROBERT L. WHITE AND TO PRECLUDE MR. WHITE'S TESTIMONY (Doc. 162) AND GRANTING DEFENDANT'S MOTION FOR PARTIAL SUMMARY JUDGMENT THAT PLAINTIFF INFO-HOLD IS NOT ENTITLED TO REASONABLE ROYALTY DAMAGES (Doc. 160)

This civil action is before the Court on Defendant's Motion to Strike the Expert Reports of Robert L. White and to Preclude Mr. White's Testimony (Doc. 162), Defendant's Motion for Partial Summary Judgment that Plaintiff Info-Hold is Not Entitled to Reasonable Royalty Damages and for Dismissal (Doc. 160), and the parties' responsive memoranda (Docs. 177, 180, 185, and 186).

I. BACKGROUND

Plaintiff Info-Hold, Inc. brings this patent infringement suit against Muzak LLC accusing it of direct infringement, contributory infringement, and induced infringement of U.S. Patent No. 5,991,374.

Defendant now moves, first, to strike the expert reports of Robert L. White, the damages expert designated by Plaintiff, and to preclude Mr. White's testimony pursuant to Fed. R. Evid. 702 and 703 (Doc. 162); and, second, for entry of partial summary judgment that Plaintiff is not entitled to reasonable royalty damages as a measure of damages against Defendant; and, therefore, third, for dismissal of this action with prejudice on the basis that Plaintiff cannot prove it is entitled to any relief. (Doc. 160).

II. STANDARD OF REVIEW

A. Admission of Expert Testimony

In its role as gatekeeper, the Court must exclude expert testimony that does not squarely comport with the Federal Rules of Evidence, including the Rule 702 requirements of qualifications, reliability, and relevance and the Rule 703 standard governing the factual bases of an expert's testimony. Fed. R. Evid. 702, 703; *Daubert v. Merrill Dow Pharm*., Inc., 509 U.S. 57, 589 (1993) ("[T]he trial judge must ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable"); *see also Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 141 (1999) (the court's gatekeeping function under *Daubert* applies equally to nonscientific expert testimony that is based on technical or other specialized knowledge). A district court's decision to admit expert testimony under *Daubert* in a patent case follows the law of the regional circuit. *Micro Chem., Inc. v. Lextron, Inc.*, 317 F.3d 1387, 1390-91 (Fed. Cir. 2003).

"The Court's gatekeeping role involves a two-prong inquiry: (1) whether the proffered testimony is reliable; and (2) whether the expert's reasoning or methodology can be properly applied to the facts at issue, i.e., whether the opinion is relevant to the facts at issue." *English Woods Civic Ass'n/Resident Cmty. Council v. Cincinnati Metro. Hous. Auth.*, No. 1:03-cv-186, 2004 WL 6043508, at *2 (S.D. Ohio Nov. 23, 2004). The party proffering an expert has the burden to show by a preponderance of evidence that the expert's testimony is reliable, relevant, and that the expert is qualified to give his opinion on each subject matter for which it is offered. *See, e.g., In re Scrap Metal Antitrust Litig.*, 527 F.3d 517, 531-32 (6th Cir. 2008); *Hardyman v. Norfolk & W. Ry. Co.*, 243 F.3d 255, 260 (6th Cir. 2001). *See also Berry v. City of Detroit*, 25 F.3d 1342, 1351 (6th Cir. 1994) ("the issue with regard to expert testimony is not the qualifications of a witness in the abstract, but whether those qualifications provide a foundation for a witness to answer a specific question").

B. Summary Judgment Standard

A motion for summary judgment should be granted if the evidence submitted to the Court demonstrates that there is no genuine issue as to any material fact, and that the movant is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(c). *See Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986); *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 247-48 (1986). As a basis for summary judgment, a moving party can point to a lack of evidence to support the facts its opponent must prove to carry its burden of proof.

Celotex, 477 U.S. at 325.

The moving party has the burden of showing the absence of genuine disputes over facts which, under the substantive law governing the issue, might affect the outcome of the action. *Id.* at 323. All facts and inferences must be construed in a light most favorable to the party opposing the motion. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986).

However, a party opposing a motion for summary judgment "may not rest upon the mere allegations or denials of his pleading, but . . . must set forth specific facts showing that there is a genuine issue for trial." *Anderson*, *supra*, 477 U.S. at 248.

III. ANALYSIS

A. Motion to Strike the Expert Reports of Robert L. White and to Preclude Mr. White's Testimony

As a threshold matter, Mr. White's testimony as presented in his expert reports is properly excluded because Plaintiff has not shown Mr. White to possess sufficient "scientific, technical, or other specialized knowledge [that] will help the trier of fact to understand the evidence or to determine a fact in issue." Fed. R. Evid. 702(a).

Mr. White and his firm have been doing tax and audit work for Plaintiff Info-Hold over the past fifteen to eighteen years. (*Id.* at 5). However, Mr. White is not specifically qualified to be an expert on damages in this case. He has never testified as a damages expert in a patent case before, and indeed has never testified as an expert in a federal

court case before. (Doc. 167-6 at 4). He has no prior experience with the *Georgia-Pacific* factors or with patent damages calculations at all, and no prior experience with patent licenses. (*Id.* at 5, 16, 38). He learned about patent damages from reviewing cases and reading the Poltorak treatise. Mr. White relied on the discredited and inadmissible 25 percent rule, unaware that it was discredited in 2011 in *Uniloc*. And Mr. White did not independently verify many of the important facts he purports to rely on in his reports.

The deficiencies in Mr. White's qualifications, his lack of knowledge of patent damages issues, and his total acceptance of a discredited rule of thumb for patent damages collectively show that his testimony is more advocacy for Plaintiff than expert testimony.

Thus, Plaintiff has failed to satisfy its burden as the party proffering Mr. White as an expert to show by a preponderance of evidence that his testimony is reliable, relevant and that he is qualified to give his opinion on each subject matter for which it is offered. *See, e.g., In re Scrap Metal Antitrust Litig.*, 527 F.3d at 531-32; *Hardyman v. Norfolk & W. Ry. Co.*, 243 F.3d at 260. Plaintiff has not shown that Mr. White's "qualifications provide a foundation for a witness to answer a specific question" on patent damages.

Most egregiously, Mr. White's reasonable royalty testimony is inadmissible as irrelevant under *Daubert* because it starts from the 25 percent rule of thumb, which is an improper legal standard for calculating damages as a matter of law. See *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1315 (Fed. Cir. 2011) ("This court now holds as a

matter of Federal Circuit law that the 25 percent rule of thumb is a fundamentally flawed tool for determining a baseline royalty rate in a hypothetical negotiation. Evidence relying on the 25 percent rule of thumb is thus inadmissible under *Daubert* and the Federal Rules of Evidence, because it fails to tie a reasonable royalty base to the facts of the case at issue").

In order for Info-Hold to carry its burden of proving damages for patent infringement, it must "sufficiently tie the expert testimony on damages to the facts of the case." *Uniloc*, 632 F.3d at 1315 (quoting *Daubert*, 509 U.S. at 591). Because Mr. White's testimony relies on an improper legal standard for calculating a reasonable royalty, without relying on other, legally acceptable grounds, it is not sufficiently tied to the facts of the case and will not "aid the jury in resolving a factual dispute." *Id.* at 1315-17 (explaining that "there must be a basis in fact to associate the royalty rates used in prior licenses to the particular hypothetical negotiation at issue in the case" and that the 25 percent rule is an "abstract and largely theoretical construct [that] fails to satisfy this fundamental requirement"). Accordingly, Mr. White's testimony is irrelevant under *Daubert* and Rule 702 and must be excluded. *Id.* at 1317 (excluding testimony of patentee's damages expert when expert relied on the 25 percent rule because the expert's "starting point of a 25 percent royalty had no relation to the facts of the case, and as such, was arbitrary, unreliable, and irrelevant"). Mr. White's reliance on the 25 percent rule "fails to pass muster under *Daubert* and taints the jury's damages calculation." *Id.* at

1318.

Plaintiff claims that Mr. White's opinions do not rely on the discredited 25 percent rule, contending instead that Mr. White's report shows that the 25 percent rule is "an alternative method" for determining reasonable royalty damages. (Doc. 177 at 11-12). However, in the view of the Federal Circuit, the 25 percent rule is not "an alternative method" at all; it is a "fundamentally flawed," forbidden method, which the Court as gatekeeper cannot allow to taint the jury's consideration of damages. *Uniloc*, 632 F.3d at 1315. Even where the 25 percent rule is offered merely as a starting point to which the relevant factors for a reasonable royalty calculation found in *Georgia-Pacific* are then applied to adjust the rate, the taint of the 25 percent rule remains because "[b]eginning from a fundamentally flawed premise and adjusting it based on legitimate considerations specific to the facts of the case nevertheless results in a fundamentally flawed conclusions." *Uniloc*, 623 F.3d at 1317.

The same logic applies here. Mr. White started with a 15% royalty rate based on his application of the 25 percent rule. (Doc. 167-3 at 19-20). Although his description of his use of the 25 percent rule claims to employ it as an "alternative method," it is the only method Mr. White ever provides for deriving the 15% royalty rate upon which he bases his *Georgia-Pacific* analysis. Although Mr. White then purports to apply the *Georgia-Pacific* factors to arrive at the proper royalty rate, his analysis never actually deviates from the same 15% royalty rate he derived from his application of the 25 percent rule.

Mr. White also purports to base his royalty rate calculation on the Trusonic settlement agreement, the Hazenfield license, a treatise by Alexander Poltorak, two cases, *Minco, Inc. v. Combustion Eng'g, Inc.*, 95 F.3d 1109 (Fed. Cir. 1996) and *Deere & Co. v. Int'l Harvester Co.*, 710 F.2d 1551 (Fed. Cir. 1983), and a document from the Securities and Exchange Commission website purporting to disclose Defendant's franchise royalty rates of 10% of billings for music services. (Doc. 167-3 at 19-20). However, Mr. White himself admits that all of this evidence is either not "pertinent" or is evidence he himself did not credit. (*Id.*; Doc. 167-6 at 44, 46, 49).[1]

Mr. White's opinions on the reasonable royalty rate all depend on his application of the 25 percent rule and rely on other evidence which Mr. White himself agrees is not "pertinent" or admittedly gave "no credit" to. His opinions on reasonable royalty rate therefore do not meet the *Daubert* standard for reliability and relevance.

Mr. White also improperly employs an entire market value calculation, failing to recognize that the entire market value rule applies "only where the patented feature creates the basis for customer demand" or "substantially create[s] the value of the component parts." *Lucent Technologies, Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1336

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[1] As Defendant points out and Plaintiff does not contest, Mr. White admitted in his deposition that because the Trusonic Agreement was entered into in 2009, it was not relevant to any hypothetical 2008 negotiation. (Doc. 162 at 10-11). Mr. White also admits that he did not rely on published royalty rate standards by industry. (Doc. 167-6 at 46) Finally, Mr. White admitted that *Minco* did not concern the same industry as this case, was not decided at a time relevant to the hypothetical negotiation, and was not "pertinent" to the reasonable royalty analysis in this case. (Doc. 167-6 at 44, 49). Evidence that is admittedly not "pertinent" to the expert's opinions cannot be the basis for a properly supported opinion under *Daubert*. *See Anchor Wall*, 340 F.3d at 1313.

(Fed. Cir. 2009; *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1549-50 (Fed. Cir. 1995). Instead of carrying out this analysis, Mr. White simply stated: "In this instance, an appropriate royalty base is comprised of all the revenue generated by Muzak on related client sales. We have included revenue generated from collateral sales (i.e., service, voice services – production services, sound system sales, appropriate consideration to these items is given in estimating the royalty rate," without providing any evidentiary basis for the statement. (Doc. 167-3 at 18).

Rule 26(a)(2)(B)(ii) requires an expert report to state the facts or data considered by the expert in forming the opinions to which the expert is expected to testify, and thus Mr. White's failure to state the factual basis for his application of the entire market value rule means that his opinions based on that application are not reliable, since they are not based on the methodology described in *Lucent Techs.*, and not relevant, since they are not tied to the facts of this case.

Moreover, to satisfy Rule 702's standards for reliability, an expert's testimony must be based on independent analysis and objective proof. *See*, *e.g*, *Johnson v. Manitowoc Boom Trucks, Inc.*, 484 F.3d 426, 430 (6th Cir. 2007).

Here, Mr. White has performed no independent analysis: instead, he relies, without verification, on Plaintiff's employees and Plaintiff's counsel for information crucial to his opinions. Mr. White assumed that all of Defendant's accused Encompass LE2 and MV revenues were driven by demand for the patented invention because he was

told to make this assumption by Plaintiff's counsel. (Doc. 167-6 at 40). All of Mr. White's knowledge regarding convoyed sales was derived from employees of Plaintiff. (*Id.* at 32-33). In fact, Mr. White did not independently verify anything that Plaintiff's CEO or Plaintiff's counsel told him. (*Id.* at 51). His testimony is more advocacy for Plaintiff than expert testimony.

Moreover, Mr. White relies entirely on the numbers provided in the report of Defendant's damages expert, David Paris, without examining any of Defendant's underlying documentation or independently verifying Mr. Paris' numbers. However, it is improper at law for Mr. White to form his opinions by relying on the facts and data of another expert's report without conducting his own investigation or independent verification. Fed. R. Evid. 703; *See, e.g., TK-7 Corp. v. Estate of Barbouti*, 993 F.2d 722, 732 (10th Cir. 1993). Additionally, Mr. White took the number of units of LE2 sales that Plaintiff allegedly would have made from an assumption presented by opposing counsel to Plaintiff's CEO at his deposition, and not based on Mr. White's own consideration of the evidence. (*Id.* at 24-25; Doc. 167-9 at 2).

Plaintiff has not shown Mr. White to possess sufficient "scientific, technical, or other specialized knowledge [that] will help the trier of fact to understand the evidence or to determine a fact in issue." Fed. R. Evid. 702(a). Accordingly, the Court strikes Mr. White's reports and precludes him from testifying at trial.

B. Motion for Partial Summary Judgment that Plaintiff Info-Hold is Not Entitled to Reasonable Royalty Damages and for Dismissal

There is no genuine dispute that, but for the now-excluded Mr. White, Info-Hold has disclosed no witness, expert or otherwise, to testify for it on the issue of reasonable royalty damages.

If Plaintiff were to present Mr. Hazenfield, Mr. Mason or Mr. Wood, the only "non-experts" identified as witnesses by Plaintiff for any purpose, as witnesses on reasonable royalty damages to testify to a hypothetical negotiation, their testimony would properly be excluded under Fed. R. Civ. P. 26(a)(2)(C) and Fed. R. Evid. 702, 703 and 705. [2]

First, lay witnesses may only give opinions limited to ones that are "rationally based on the witness's perception," Fed. R. Evid. 701(a), and testimony as to how a hypothetical negotiation might proceed is not based on the perception of the witness of events within their personal knowledge. Second, presenting testimony on the hypothetical negotiation requires that the witness "reconstruct the market, a necessarily hypothetical exercise, to project economic results that did not actually occur." *Riles v. Shell Exploration & Prod. Co.*, 298 F.3d 1302, 1311 (Fed. Cir. 2002). Moreover, "to

[2] These witnesses have not submitted reports pursuant to Fed. R. Civ. P. 26(a)(2)(C) as witnesses not required to submit reports under Fed. R. Civ. P. 26(a)(2)(B) who are being called on to present evidence under Fed. R. Evid. 702, 703 or 705. Plaintiff's failure in this regard invokes Fed. R. Civ. P. 37(c)(1) which provides that "[i]f a party fails to provide information or identify a witness as required by Rule 26(a) or (e), the party is not allowed to use that information or witness to supply evidence on a motion, at a hearing, or at a trial, unless the failure was substantially justified or is harmless." And here the failure is neither substantially justified nor harmless.

prevent the hypothetical from lapsing into pure speculation, this court requires sound economic proof of the nature of the market and likely outcomes with infringement factored out of the economic picture." *Id.* There is no evidence that Plaintiff's lay witnesses have the knowledge or expertise to provide such evidence based on personal knowledge.

There are no potential damages witnesses for Plaintiff to call at trial whatsoever, leaving it with no admissible evidence on reasonable royalty damages. All the additional "evidence" referred to in Plaintiff's memorandum in opposition is either not in the record as required by Fed. R. Civ. P. 56(c)(1) and/or is not presented in a form that is admissible in evidence at trial. Fed. R. Civ. P. 56(c)(2). Therefore, because Plaintiff has not presented evidence to make out even a *prima facie* case of reasonable royalty damages, summary judgment is proper on the issue of reasonable royalty damages. *See, e.g.*, *Apple, Inc. v. Motorola, Inc.*, 869 F.Supp.2d 901, 906 (N.D. Ill. 2012). To avoid summary judgment, Plaintiff needed to make of record now any admissible evidence it had to show that there is a triable damages case for the fact finder to consider. Plaintiff has not pointed to evidence in the record that would allow a reasonable jury to find reasonable royalty damages.

Accordingly, the Court grants Defendant's motion for entry of partial summary judgment on the issue of reasonable royalty damages.

Defendant's Motion to Strike the Expert Reports of Robert L. White and to Preclude Mr. White's Testimony (Doc. 162) is **GRANTED**. Defendant's Motion to Strike the Expert Reports of Robert L. White and to Preclude Mr. White's Testimony and for Dismissal (Doc. 162) is **GRANTED IN PART** as Defendant is entitled to entry of partial summary judgment on the issue of reasonable royalty damages, but the Motion is **DENIED IN PART** as to Dismissal, because Dismissal is not yet ripe, given the Scheduling Order reflected below.

Scheduling Order

Plaintiff has now been found not to be entitled to any measure of damages in this action and has conceded that it is not entitled to injunctive relief. (Docs. 130, 139). Accordingly, in a memorandum to be filed by September 11, 2013, Plaintiff shall show cause why final judgment should not be entered against it and this case closed in this Court. Defendant may file a reply by September 18, 2013.

The trial set to commence on October 15, 2013 is hereby **VACATED**, as is the Final Pretrial Conference of October 7, 2013.

IT IS SO ORDERED.

Date: August 20, 2013

s/ Timothy S. Black
Timothy S. Black
United States District Judge

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF OHIO
WESTERN DIVISION

INFO-HOLD, INC.,	:	Case No. 1:11-cv-283
Plaintiff,	:	Judge Timothy S. Black
vs.	:	
MUZAK LLC,	:	
Defendant.	:	

ORDER DENYING PLAINTIFF'S MOTION FOR RECONSIDERATION (Doc. 205) AND ENTERING FINAL JUDGMENT AGAINST PLAINTIFF

This civil action is before the Court on Plaintiff's Motion for Reconsideration of Order Granting Defendant's Motion to Strike the Expert Reports of Robert L. White and to Preclude Mr. White's Testimony and Granting Defendant's Motion for Partial Summary Judgment That Plaintiff Info-Hold Is Not Entitled to Reasonable Royalty Damages (Doc. 205), Plaintiff's Memorandum Showing Cause Why Final Judgment Should Not Be Entered Against It (Doc. 206), and the parties' responsive memoranda (Docs. 207, 208, and 209).

I. ANALYSIS

A. Motion for Reconsideration

Motions for reconsideration "may not be used to relitigate old matters, or to raise arguments or present evidence that could have been raised prior to the entry of judgment." *Exxon Shipping Co. v. Baker*, 544 U.S. 471, 485 n. 5 (2008) (quoting 11. C. Wright & A. Miller, *Federal Practice and Procedure*, § 2810.1, at 127-28 (2d ed. 1995)).

Thus, "courts will [only] find jurisdiction for reconsidering interlocutory orders where there is (1) an intervening change of controlling law; (2) new evidence available; or (3) a need to correct a clear error or prevent manifest injustice." *Louisville/Jefferson County Metro Gov't v. Hotels.com, L.P.*, 590 F.3d 381, 389 (6th Cir. 2009).

Plaintiff's motion purports to be responsive to these criteria, but in reality is wholly premised on inappropriate bases for granting reconsideration. The entire memorandum in support of Plaintiff's motion for reconsideration is comprised of re-argument of issues already presented to, considered, and decided by the Court, and attempts to introduce arguments and evidence that could have been presented in opposition to Defendant's original motions, but were not.

1. Order Striking Mr. White's Expert Reports and Precluding His Testimony

As a preliminary matter, Plaintiff fails to address at all the fact that Mr. White's improper reliance on the entire market value rule taints his testimony on the royalty base to which any royalty rate would be applied, and thus requires its exclusion. *LaserDynamics v. Quanta Computer, Inc.*, 694 F.3d 51, 68-69 (Fed. Cir. 2012) (testimony based on the entire market value rule was properly excluded where the offeror "presented no evidence that its patented method drove the demand" for the product). This is an independent basis for the Court's exclusion of the evidence proffered by Mr. White.

Moreover, the rest of Plaintiff's arguments regarding Mr. White's qualifications and expert testimony are attempts to re-litigate issues already considered and decided by the Court or to bring up new arguments that could have been brought in Plaintiff's response to Defendant's initial motion.

Based on the foregoing, Plaintiff has demonstrated no legitimate basis on which it can request reconsideration of the Court's Order excluding Mr. White's expert reports and precluding his testimony.

2. Order Granting Defendant's Partial Motion for Summary Judgment

Plaintiff first attempts to re-litigate the question whether the Court is obligated to award damages under the Patent Act. (Doc. 205 at 3-5). However, there is nothing in Plaintiff's renewed argument that was not presented, or could not have been presented before, which alone is a proper basis to deny reconsideration. Moreover, courts do not award patent damages without supporting evidence or on the basis of speculation or conjecture. *See, e.g., Whitserve LLC v. Computer Packages, Inc.*, 694 F.3d 10, 29-33 (Fed. Cir. 2012); *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 868-73 (Fed. Cir. 2010). It is true that a district court must determine a reasonable royalty based on whatever evidence is in the record, *Dow Chem. Co. v. Mee Indus.*, 341 F.3d 1370, 1382 (Fed. Cir. 2003), but as the Court has already found, Plaintiff did not present record evidence from which even a *prima facie* case of damages could be cobbled together. As a result, Plaintiff failed to present evidence from which a reasonable fact finder could

determine by a preponderance of the evidence what its reasonable royalty damages might be. *Celotex Corp. v. Catrett*, 477 U.S. 317, 323-24 (1986). Here, unlike in *Dow*, the exclusion of Mr. White's reports and testimony means that there is no sponsoring witness through whom Plaintiff can introduce the exhibits to which he referred. Neither a jury nor this Court can be expected to invent a reasonable royalty out of thin air, particularly given that the Federal Circuit requires "sound economic proof of the nature of the market and likely outcomes" in order "to prevent the hypothetical from lapsing into pure speculation[.]" *Riles v. Shell Exploration & Prod. Co.*, 298 F.3d 1302, 1311 (Fed. Cir. 2002).

Plaintiff next argues that Defendant has not met its burden of establishing the lack of a triable issue of material fact regarding Plaintiff's entitlement to a reasonable royalty. (Doc. 205 at 5-7). Again, there is nothing in Plaintiff's renewed argument that was not presented or could not have been presented before, which truth compels the denial of reconsideration. Moreover, Defendant clearly pointed to the absence of evidence in the record that would allow a reasonable jury to find that Plaintiff could prove the amount of reasonable royalty damages to which it was entitled. (Doc. 160-1 at 1-2, 7-8). Defendant did not contend that Plaintiff had to come forth with all evidence relating to reasonable royalty damages, but simply enough to demonstrate a genuine issue of material fact in order to survive Defendant's summary judgment motion. Plaintiff did not do so, and Defendant's motion was therefore properly granted.

Plaintiff next argues that it "has several competent damages witnesses to call at trial." (Doc. 205 at 7). Again, there is nothing in Plaintiff's renewed argument that was not presented or could not have been presented before, which alone is a basis on which to deny reconsideration. Moreover, regardless of what Mr. Hazenfield and Mr. Mason could have testified to, it is undisputed that none of that testimony is "in the record" in response to Defendant's summary judgment motion as required by Fed. R. Civ. P. 56(c)(1). Furthermore, Mr. Hazenfield and Mr. Mason also cannot testify regarding the determination of a reasonable royalty because they were not properly disclosed as witnesses who would testify regarding damages.[1] And even if Mr. Hazenfield and/or Mr. Mason had properly been disclosed as damages witnesses, their lay witness testimony would not be admissible to show reasonable royalty damages because lay witness testimony is only admissible under Fed. R. Evid. 701 when "rationally based on the perception of the witness" and "not based on scientific, technical, or other specialized

[1] *See, e.g., Veritas Operating Corp. v. Microsoft Corp.*, No. 2:06-cv-00703-JCC, 2008 WL 657936, at *25-28, *31 (W.D. Wash. Jan. 17, 2008) (lay witness not permitted to testify to patent damages because plaintiff failed to disclose him as a witness having discoverable information on damages and failed to supplement the purview of his disclosed testimony to include damages; the court reasoned that no justification for these failures was given, failure to disclose was not harmless because it was too late for defendant to conduct further discovery with respect to witness's newly offered damages testimony, and exclusion of testimony was proper under Rule 37 which "gives teeth" to Rule 26 requirements of disclosure and supplementation).

knowledge within the scope of Rule 702[, governing expert testimony]."[2] Plaintiff also cannot rely on Mr. White as a lay witness, as his testimony as a non-expert is excluded under Rule 37(c)(1) for Plaintiff's failure to disclose him as a person with knowledge under Rule 26(a); moreover, his testimony is inadmissible under Rule 701 for the same reasons as those applying to Mr. Hazenfield and Mr. Mason. Plaintiff has not presented any witnesses who can testify to reasonable royalty damages.

Finally, Plaintiff argues that Fed. R. Civ. P. 56 does not require that summary judgment materials be admissible, but rather that the party opposing the materials show that they cannot be submitted in admissible form, and that there is evidence in the record to support a reasonable royalty award. (Doc. 205 at 12-16). Again, there is nothing in Plaintiff's renewed argument that was not presented or could not have been presented before, which alone is a basis on which to deny reconsideration. As a preliminary matter, the hypothetical lay witness testimony already addressed above also lacks any evidence

[2] *See also Auto Indus. Supplier v. Ford Motor Co*., 435 F. App'x 430, 458 (6th Cir. 2011) (lay witness could not establish a foundation for the plaintiff's damages case because he lacked personal knowledge of the plaintiff's specific damages calculations); *JGR, Inc. v. Thomasville Furniture Indus., Inc*., 370 F.3d 519, 525-26 (6th Cir. 2004) (vacating jury's damage award and remanding for a new damages trial because the district court improperly admitted lay opinion testimony on lost profits in a breach of contract case when the damage calculus was outside the witness's personal knowledge and the witness "had no basis upon which to offer lay opinion testimony"); *AVM Tech., LLC v. Intel Corp*, 927 F.Supp.2d 139, 146-47 (D. Del. 2013) (testimony of patent inventor not admissible to show reasonable royalty because the proffered testimony would be "improper expert opinion" that is "the province of expert analysis" and based on speculative hypotheticals); *Veritas Operating Corp*., 2008 WL 657936, at *33 (after patent damages expert was excluded, court rejected plaintiff's argument that its lay witness employee could testify regarding monetary damages because such testimony was not properly disclosed during discovery, the witness was not qualified to testify as an expert, and a lay witness may not offer an opinion on ultimate patent damages, including evidence of a reasonable royalty).

of the royalty base to which a reasonable royalty rate would be applied, because all of Defendant's sales and financial data is designated Attorney Eyes Only. As such, it cannot be seen by Mr. Hazenfield or Mr. Mason, and given that Mr. White has appropriately been precluded from testifying as an expert, he is also precluded from testifying based on it. Moreover, per this Court's Standing Order Governing Civil Motions for Summary Judgment:

> Each statement of material fact in a statement of Proposed Undisputed Facts or Response to Proposed Undisputed Facts, and each denial in a statement of Disputed Issues of Material Fact, must be followed by a specific citation or citations to (1) the affidavit of a witness competent to testify as to the facts at a trial, (2) a sworn deposition, and/or (3) other evidence, including documentary evidence, that would be admissible at trial.

See http://www.ohsd.uscourts.gov/judges/fpblack.htm.[3] Although Plaintiff insists it has admissible evidence, it does not adequately explain how any of the alleged evidence it mentions could not be reduced to admissible form or respond to any of the authentication, foundation, hearsay, or other admissibility issues raised by Defendant in its summary judgment pleadings. Plaintiff failed to demonstrate any evidence on which the Court could properly deny Defendant's summary judgment motion and fails to demonstrate any basis for reconsideration of that finding here.

[3] *See also Yates-Mattingly v. Lineback*, No. 1:11-cv-753, 2013 WL 3976313, at *10 (S.D. Ohio Aug. 1, 2013) ("Federal Rule of Civil Procedure 56 requires that all evidence relied upon in moving for summary judgment be admissible at trial"); *Villegas v. Metro. Government of Nashville*, 709 F.3d 563, 576 n.7 (6th Cir. 2013) (refusing to consider inadmissible hearsay when evaluating summary judgment because "[s]uch rank hearsay cannot be relied upon by a court when ruling on a summary judgment motion").

Plaintiff's entire motion and memorandum is composed of improper attempts to argue against motions that have already been thoroughly considered and granted by the Court. Plaintiff fails to satisfy even the most basic criteria for reconsideration.

B. Final Judgment

As stated, courts may not enter patent damages awards without supporting evidence or on the basis of speculation or conjecture. *See, e.g.*, *Whitserve LLC*, 694 F.3d at 29-33; *ResQNet.com, Inc*., 594 F.3d at 868-73. Even where a patentee is entitled to damages not less than a reasonable royalty upon a finding of infringement, the patentee still must prove what those damages are with admissible evidence. *Devex Corp. v. General Motors Corp*., 667 F.2d 347, 361 (3d Cir. 1981) (cited with approval in *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co*., 895 F.2d 1403, 1407 (Fed. Cir. 1990) ("The statute requires the award of a reasonable royalty, but to argue that this requirement exists even in the absence of any evidence from which a court may derive a reasonable royalty goes beyond the possible meaning of the statute")). Here, Plaintiff has not demonstrated that it is entitled to any measurable remedy and thus is not a prevailing party to whom costs or attorneys' fees can be awarded, and Plaintiff's Memorandum Showing Cause Why Final Judgment Should Not Be Entered Against It (Doc. 206) is unavailing.

Finally, the Court notes that Defendant has consented to the dismissal of its declaratory judgment counterclaim without prejudice. (Doc. 160-1 at 9; Doc. 207 at 3).

II. CONCLUSION

Accordingly, based on the foregoing:

1. Plaintiff's Motion for Reconsideration of Order Granting Defendant's Motion to Strike the Expert Reports of Robert L. White and to Preclude Mr. White's Testimony and Granting Defendant's Motion for Partial Summary Judgment That Plaintiff Info-Hold Is Not Entitled to Reasonable Royalty Damages (Doc. 205) is **DENIED**;

2. Defendant's declaratory judgment counterclaim is **DISMISSED** without prejudice;

3. The Clerk shall **ENTER Final Judgment against Plaintiff**; and

4. This case shall be **CLOSED**.

IT IS SO ORDERED.

Date: 11/13/13

/s/ Timothy S. Black
Timothy S. Black
United States District Judge

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF OHIO
WESTERN DIVISION

INFO-HOLD, INC.,

Plaintiff,

-vs-

MUZAK LLC,

Defendant.

Case No. 1:11-CV-283

Judge Timothy S. Black
Magistrate Judge Karen L. Litkovitz

JUDGMENT IN A CIVIL CASE

[ ] Jury Verdict: This action came before the Court for a trial by jury. The issues have been tried and the Jury has rendered its verdict.

[X] Decision by Court:

IT IS ORDERED AND ADJUDGED that the Plaintiff's Motion for Reconsideration of Order Granting Defendant's Motion to Strike the Expert Reports of Robert L. White and to Preclude Mr. White's Testimony and Granting Defendant's Motion to Partial Summary Judgment That Plaintiff Info-Hold is Not Entitled to Reason Royalty Damages (Doc. 205) is **DENIED**; the Defendant's declaratory judgment counterclaim is **DISMISSED** without prejudice; Final Judgment is **ENTERED** against the Plaintiff; and the case is **CLOSED** from the docket of the Court.

Date: November 13, 2013

JOHN P. HEHMAN, CLERK

By: *s/ M. Rogers*
Deputy Clerk

US005991374A

United States Patent [19]

Hazenfield

[11] Patent Number: 5,991,374

[45] Date of Patent: Nov. 23, 1999

[54] **PROGRAMMABLE MESSAGING SYSTEM FOR CONTROLLING PLAYBACK OF MESSAGES ON REMOTE MUSIC ON-HOLD-COMPATIBLE TELEPHONE SYSTEMS AND OTHER MESSAGE OUTPUT DEVICES**

[76] Inventor: **Joey C. Hazenfield**, 2677 Little Dry Run Rd., Cincinnati, Ohio 45244

[21] Appl. No.: **08/694,854**

[22] Filed: **Aug. 8, 1996**

[51] **Int. Cl.**[6] **H04M 3/42**

[52] **U.S. Cl.** **379/101.01**; 379/88.11; 379/88.22

[58] **Field of Search** 379/67, 74, 76, 379/87, 88, 89, 90.01, 93.01, 101.01, 102.03, 201, 457, 67.1, 88.11, 88.15, 88.16, 88.17, 88.18, 88.22, 88.25; 340/825.44, 825.47, 825.52; 348/6, 7; 455/500, 70, 3.1, 3.2, 6.3, 412, 418, 31.2, 39

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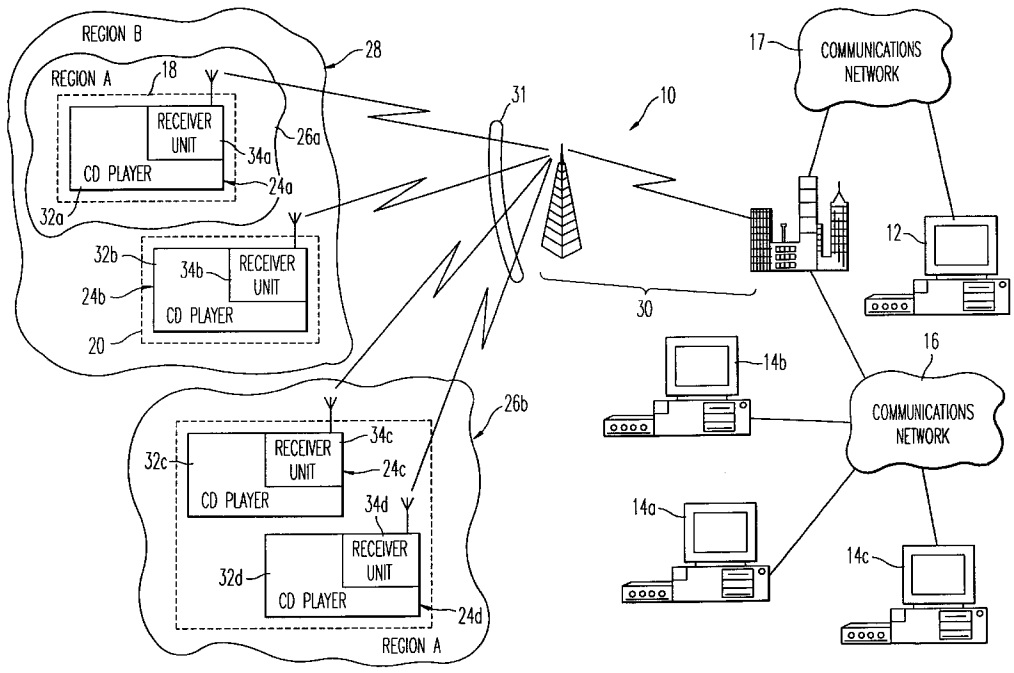
Primary Examiner—Scott Weaver

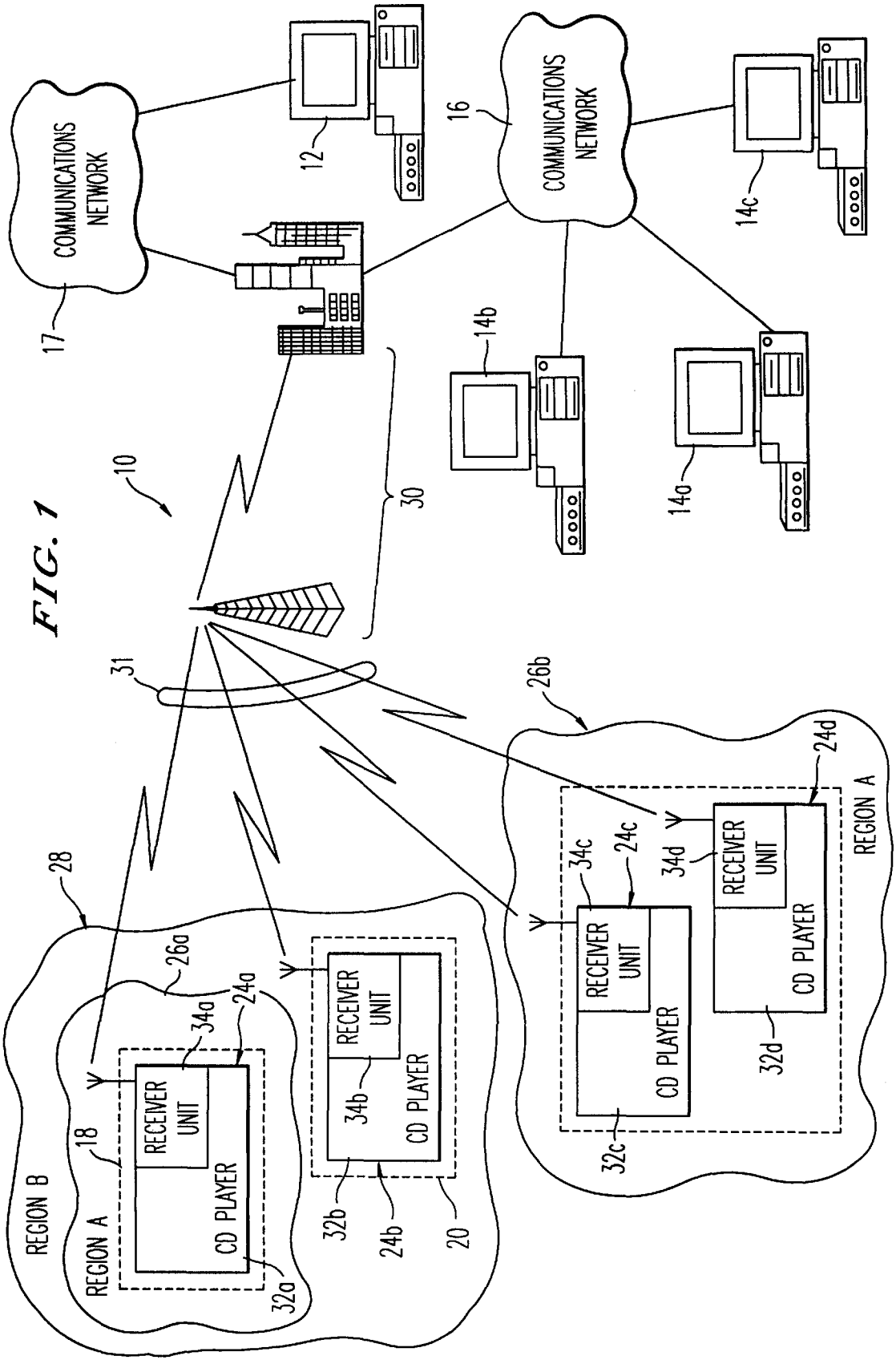
Attorney, Agent, or Firm—Roylance, Abrams, Berdo & Goodman, L.L.P.

[57] **ABSTRACT**

A remotely programmable message delivery system comprises a number of client computers which communicate with a server to send control signals to one or more remote message playback devices. The message playback devices are each provided with a library of messages, and comprise at least one music on-hold-compatible telephone system, a public address system or other audio and/or visual advertising device. Message playlists from the client computers can be sent via the server to the message playback devices by a communication link such as a radiopaging system. The client computer is programmed to generate screens for guiding an operator to select messages from the library of messages and the order and times at which they are to be played by selected message playback devices. Message playback devices can be organized into one or more regions to allow a message playlist to be sent to more than one message playback device using a single radiopaging signal. The client computer can also generate screens to display the text of selected messages.

36 Claims, 27 Drawing Sheets

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20

FIG. 1

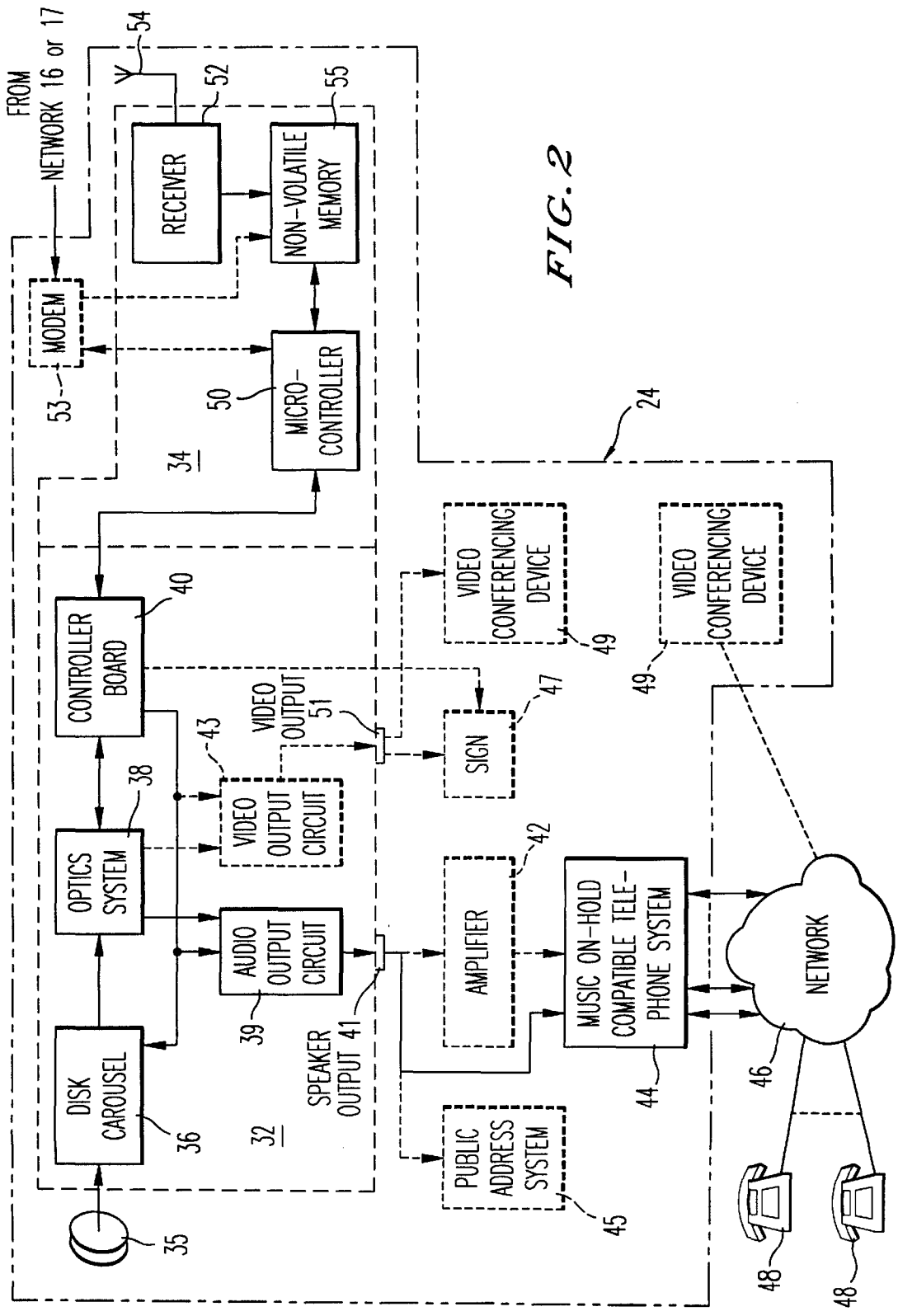
FROM NETWORK 16 or 17
54
52
55
RECEIVER
NON-VOLATILE MEMORY
MODEM
53
50
MICRO-CONTROLLER
34
24
VIDEO CONFERENCING DEVICE
49
VIDEO CONFERENCING DEVICE
49
CONTROLLER BOARD
40
VIDEO OUTPUT 51
47
SIGN
43
VIDEO OUTPUT CIRCUIT
38
OPTICS SYSTEM
AUDIO OUTPUT CIRCUIT
39
SPEAKER OUTPUT 41
42
AMPLIFIER
MUSIC ON-HOLD COMPATIBLE TELE-PHONE SYSTEM
44
NETWORK
46
DISK CAROUSEL
36
32
PUBLIC ADDRESS SYSTEM
45
35
48
48

FIG. 2

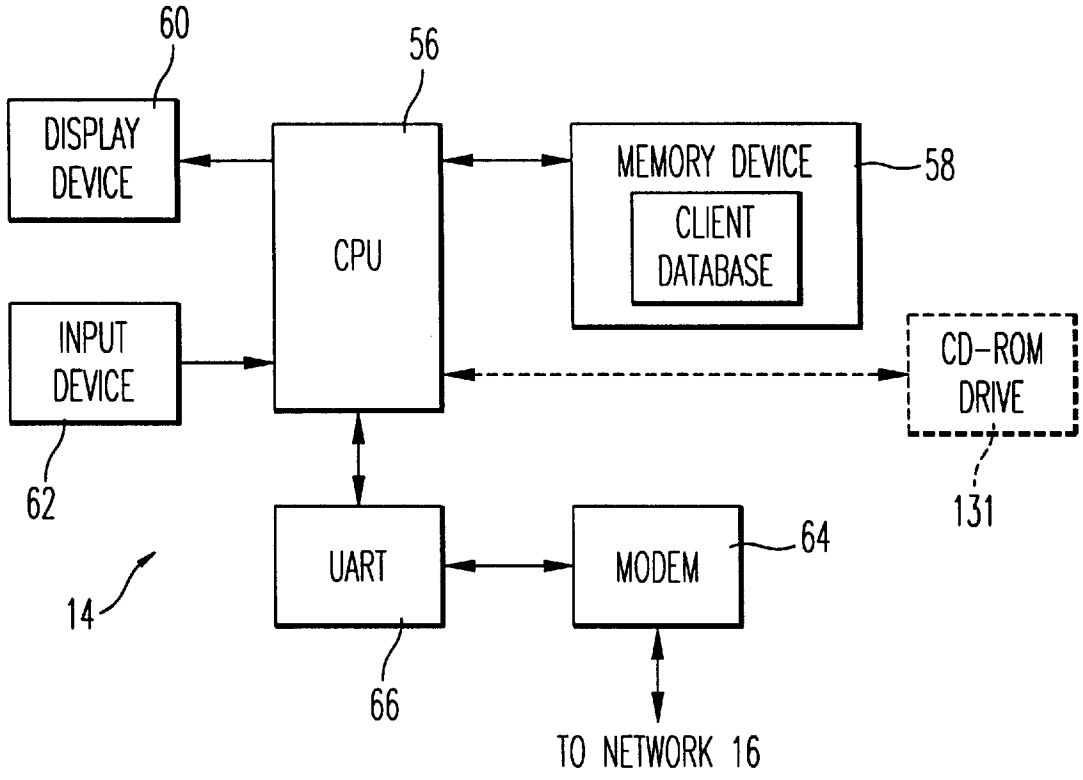
60
56
DISPLAY DEVICE
CPU
MEMORY DEVICE
58
CLIENT DATABASE
INPUT DEVICE
CD-ROM DRIVE
62
131
14
UART
MODEM
64
66
TO NETWORK 16

FIG. 3

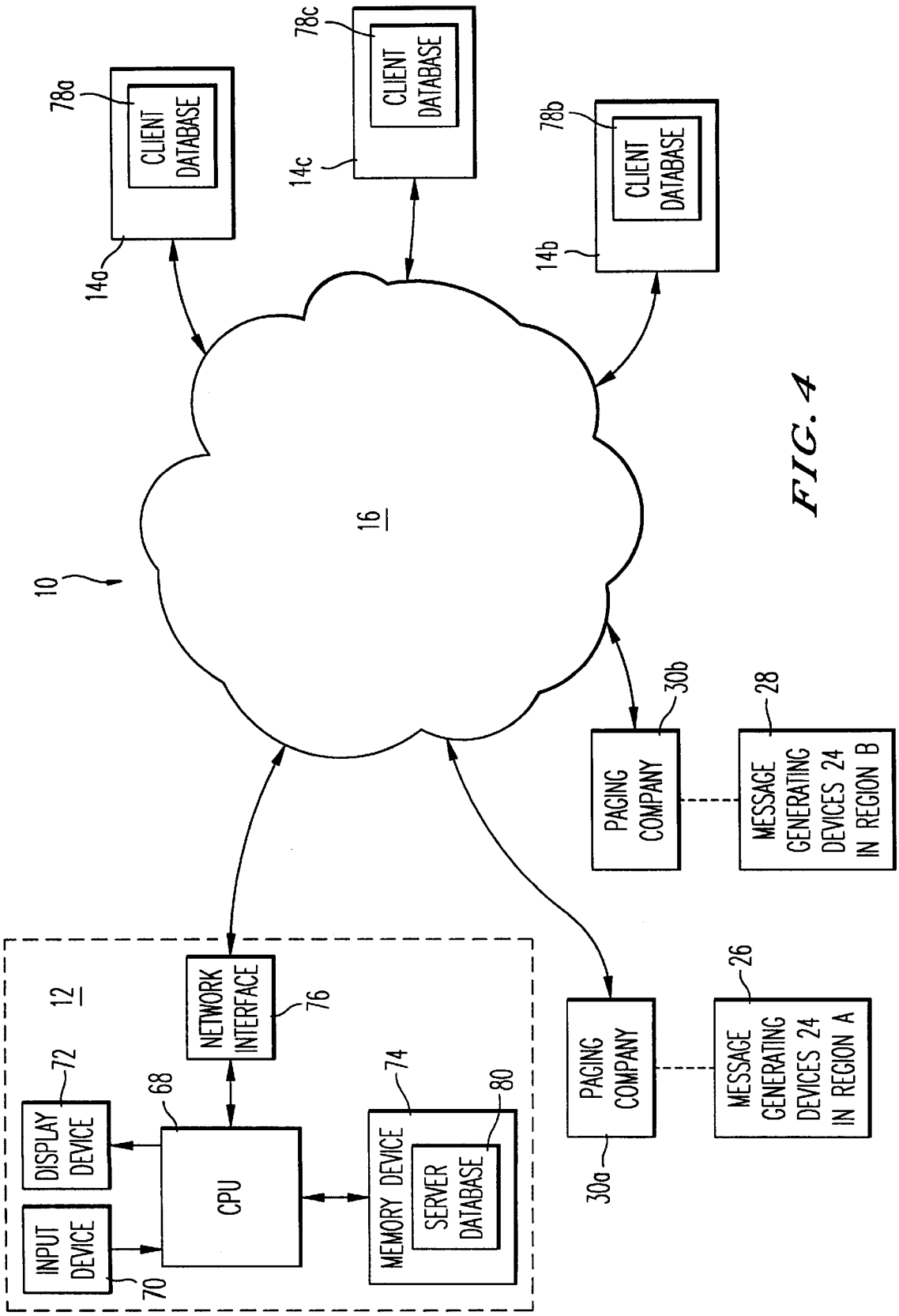
78a
CLIENT DATABASE
14a
78c
CLIENT DATABASE
14c
78b
CLIENT DATABASE
14b
16
10
PAGING COMPANY
30b
28
MESSAGE GENERATING DEVICES 24 IN REGION B
PAGING COMPANY
30a
26
MESSAGE GENERATING DEVICES 24 IN REGION A
12
NETWORK INTERFACE
76
DISPLAY DEVICE
72
INPUT DEVICE
70
CPU
68
MEMORY DEVICE
74
SERVER DATABASE
80

FIG. 4

82

Field	Type	Description
ACCOUNT	Long	Customer account number
ESN	Long	Electronic serial number
MANDATE	Date	Date of manufacture
REGION	Text	Region
BMN1	Long	Auxiliary BMN #1
BMN2	Long	Auxiliary BMN #2
BMN3	Long	Auxiliary BMN #3
MODEL	Text	Model number
FIRMREV	Text	Firmware revision
FIRMNUM	Text	Firmware ID number
CNFGDATE	Date	Date of last configuration programming
STATDATE	Date	Date of last status read
ZERODATE	Date	Date of last statistics clear
PAGECNT	Long	Total page count
PAGEERR	Long	Total corrupted page count
PAGESNT	Long	Total transmitted page count
CNFGPEND	Byte	'C' for configuration pending, 'R' for region change pending

FIG. 5

84

Field	Type	Description
PORT	Byte	Port number
FUNC	Byte	Port function
ENAB	Byte	1=Port enabled
CHANGE	Date	Date of last change

FIG. 6

86

Field	Type	Description
ACCOUNT	Long	Customer account number
PW1	Text	Current access password
PW2	Text	Previous access password
CUSTNAME	Text	Customer name
ADDRESS1	Text	Address line 1
ADDRESS2	Text	Address line 2
CITY	Text	City
STATE	Text	State
ZIP	Text	Zip or other mailing code
PHONE	Text	Telephone number
FAX	Text	FAX number
CONTACT	Text	Contact name
SALESREP	Text	Sales representative name
MAKEDATE	Date	Record creation date
EDITDATE	Date	Record last edit date

FIG. 7

90

Field	Type	Description
ACCOUNT	Long	Customer account number
REGION	Text	Region name
KEY	Long	Region key
SSTATE	Integer	Record status
BMN	Long	Broadcast method number
RN	Integer	Region number
DESCRIP	Text	Description of region
MAKEDATE	Date	Record creation date
EDITDATE	Date	Record last edit date

FIG. 9

88

Field	Type	Description
ACCOUNT	Long	Customer account number
SITE	Text	Site name
KEY	Long	Site key
SSTATE	Integer	Synchronization
ESN	Long	CDPC electronic serial number
MANAGER	Text	Site manager
REGKEY	Long	Current region (by Key)
NREGKEY	Long	Newly selected region (by Key)
ADDRESS1	Text	Address line 1
ADDRESS2	Text	Address line 2
CITY	Text	City
STATE	Text	State code
ZIP	Text	Zip code
PHONE	Text	Telephone number
FAX	Text	FAX number
COUNTRY	Text	Country
HOURS	Text	Hours of operation
NOTES	Text	Notes
MAKEDATE	Date	Record creation date
EDITDATE	Date	Record last edit date

FIG. 8

92

State	Value	Description
ssNew	0	The Client record has been created, but it has not yet been forwarded to the Server.
ssPend	1	The Client record has been forwarded to the Server, but is still awaiting transmission.
ssSync	2	The Server record and the Client record are up-to-date.
ssMod	3	The Client record has been changed, but the changes have not yet been forwarded to the Server.
ssReady	4	The Server record has been processed, but the Client has not yet been notified.
ssDel	5	The record has been deleted by the Client and requires administrative attention.

FIG. 10

94

Field	Type	Length	Description
ACCOUNT	Long		Customer account number
MCODE	Long		Message Code
TITLE	Text	32	Descriptive title of message
SIG	Boolean		TRUE for a signature track
TRAK	Integer		Uncorrected track assignment
LIBDISC	Integer		Library CD number
LIBTRAK	Integer		Library track number
READER	Text	16	Reader code, MALE, FEMALE, etc.
COPY	Memo		Message copy
INTROTIME	Integer		Introduction time (seconds)
READTIME	Integer		Reading time (seconds)
TRAILTIME	Integer		Trailer time (seconds)
RECDATE	Date		Date message was recorded
SSTATE	Integer		Synchronization status

FIG. 11

96

Field	Type	Description
ACCOUNT	Long	Customer account number
SITEKEY	Long	Site name
MCODE	Long	Message code
TRAK	Integer	Corrected track number

FIG. 12

98

Status	Meaning
ssNew	The message record has been entered into the Server database and needs to be sent to the Client.
ssPend	The message record has been downloaded to the user for approval.
ssSync	The message has been approved by the Customer.
ssMod	The message record has been changed in the Server database and needs to be re-sent to the Client.
ssReady	The message record has been approved in the Client database, but the Server needs to be notified.

FIG. 13

100

Field	Type	Description
BMN	Long	Broadcast method number
CARKEY	Text	Carrier key
PIN	Text	PIN number
CAPCODE	Long	Capcode
FORMAT	Byte	Format code
FREQ	Long	Frequency (Hz)
BW	Long	Bandwidth (Hz)
COVERAGE	Text	Coverage region

FIG. 14

102

Field	Type	Description
CARRIER	Text	Carrier name
KEY	Long	Carrier key
INPUTFMT	Byte	Input format code
ADDRESS	Text	Phone number or TCP/IP address
MODINIT	Text	Modem initialization string
RESPONSE	Text	ixo/TAP response
PKTSIZE	Integer	Maximum packet size

FIG. 15

104

Field	Type	Description
ACCOUNT	Long	Customer account number
SEQ	Long	Playlist sequence number
LIST	Text	Playlist name
URGENT	Byte	Urgent flag
SENDDATE	Date	Date to send command
MAKEDATE	Date	Creation date
EDITDATE	Date	Last modified date
SENDDATE	Date	Scheduled transmission date
SSTATE	Byte	Synchronization status

FIG. 16

106

Field	Type	Description
ACCOUNT	Long	Customer account number
SEQ	Long	Command sequence number
POS	Byte	Relative position in Playlist
MCODE	Long	Message code

FIG. 17

108

Field	Type	Description
ACCOUNT	Long	Customer account number
SEQ	Long	Command sequence ID
SITEKEY	Long	Site key
SENT	Boolean	Sent flag

FIG. 18

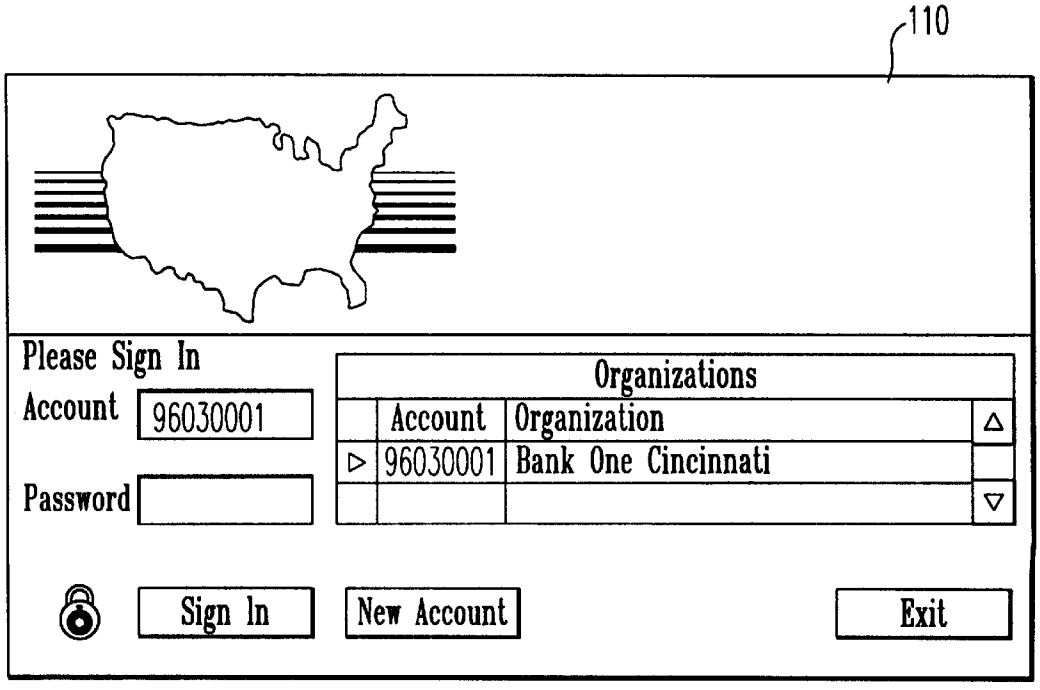

FIG. 19

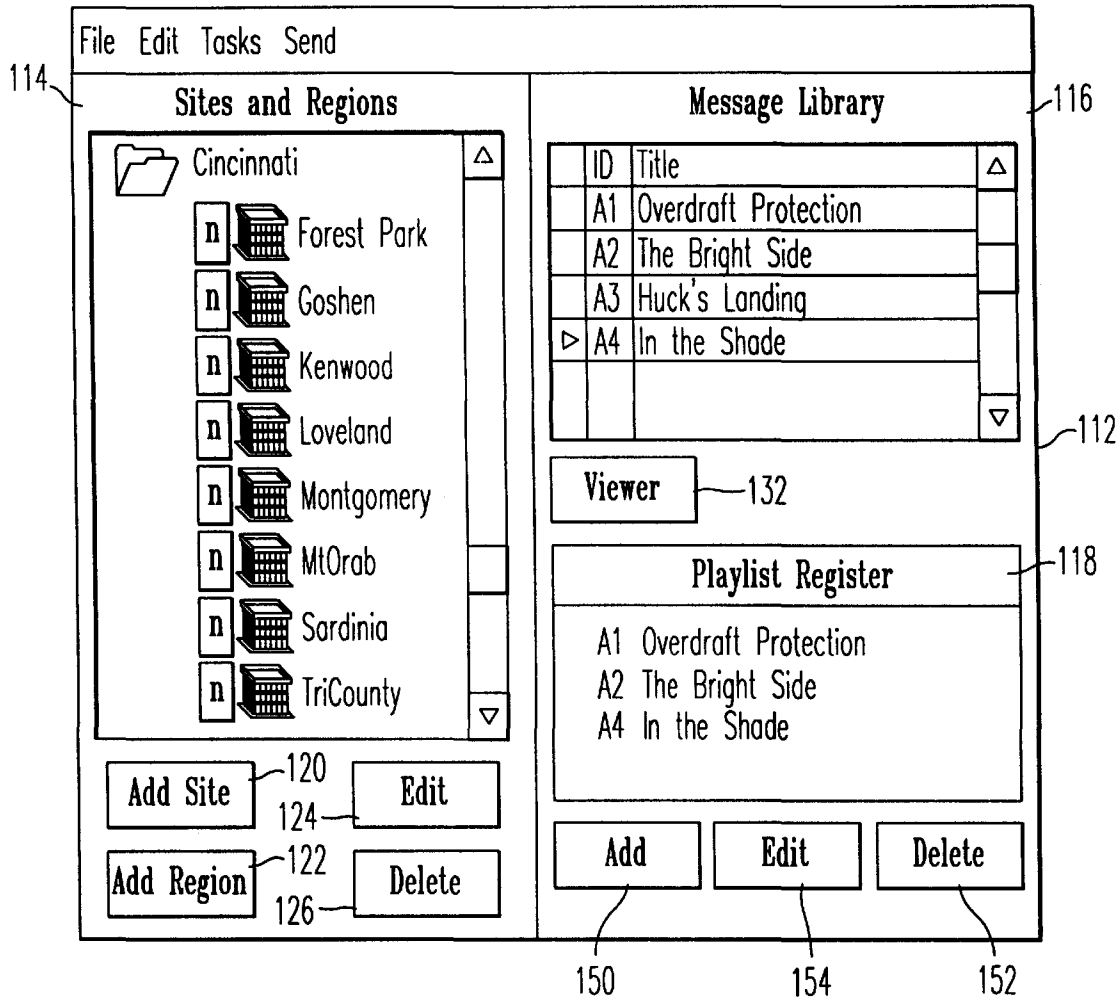

FIG. 20

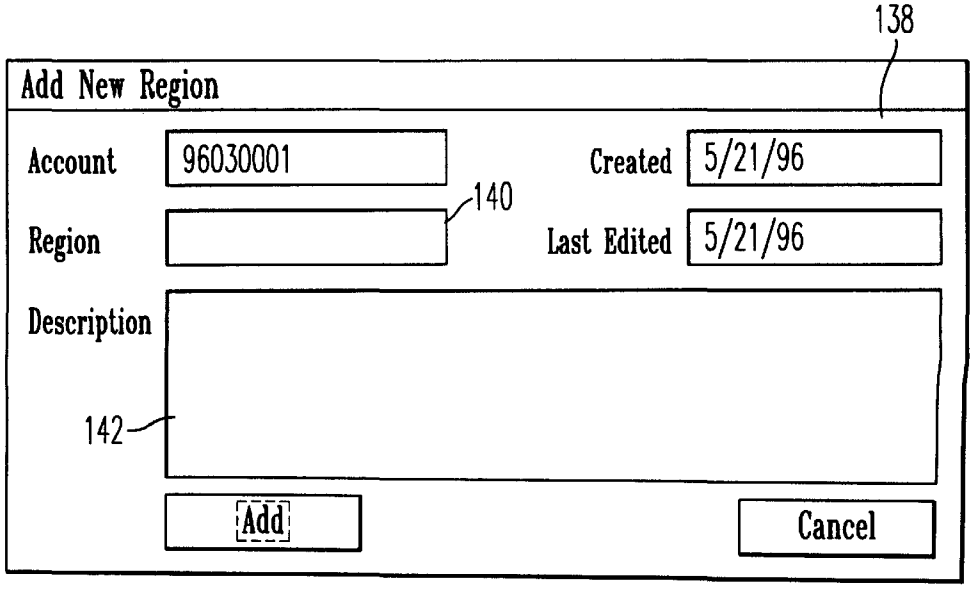

FIG. 25

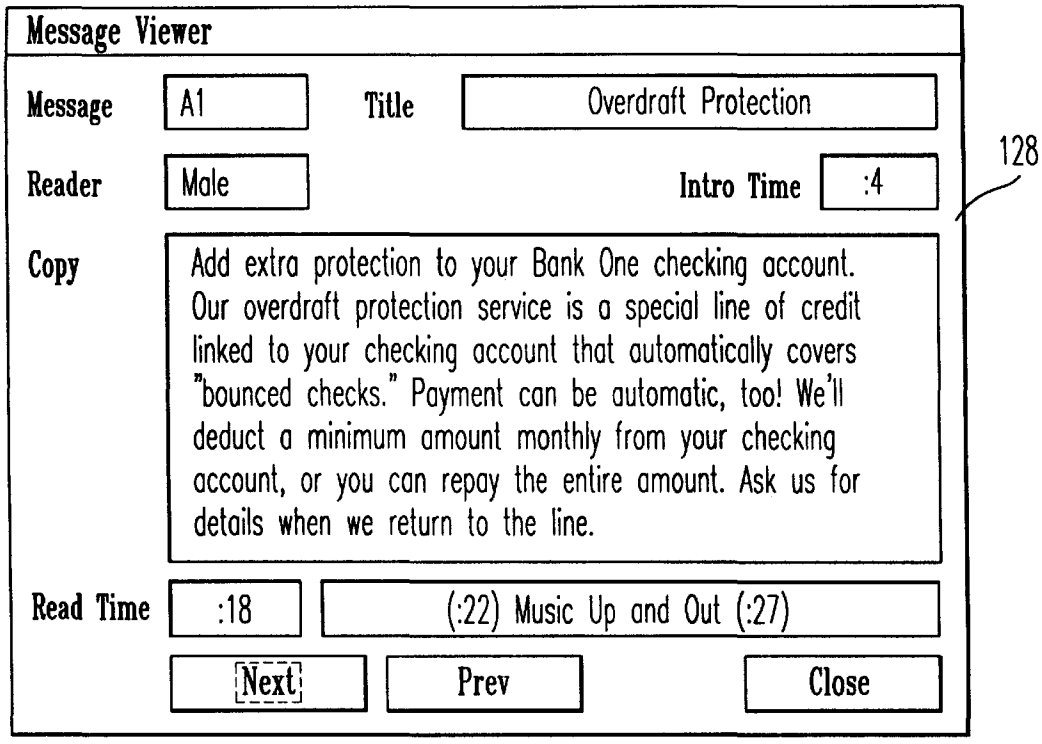

FIG. 21

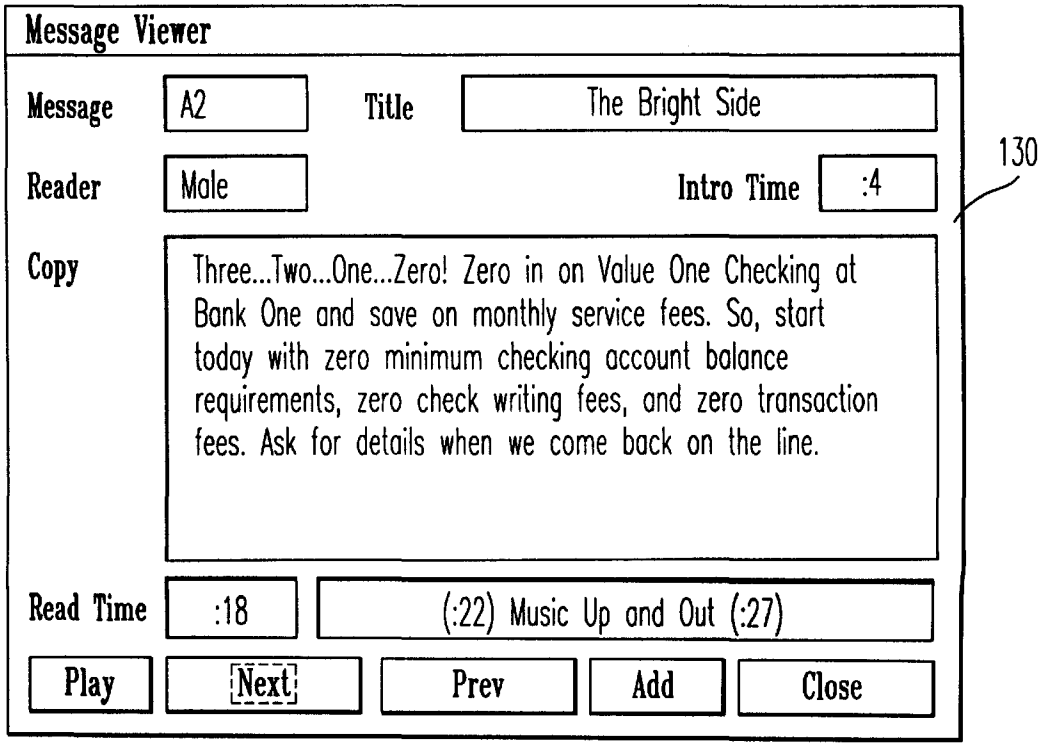

FIG. 22

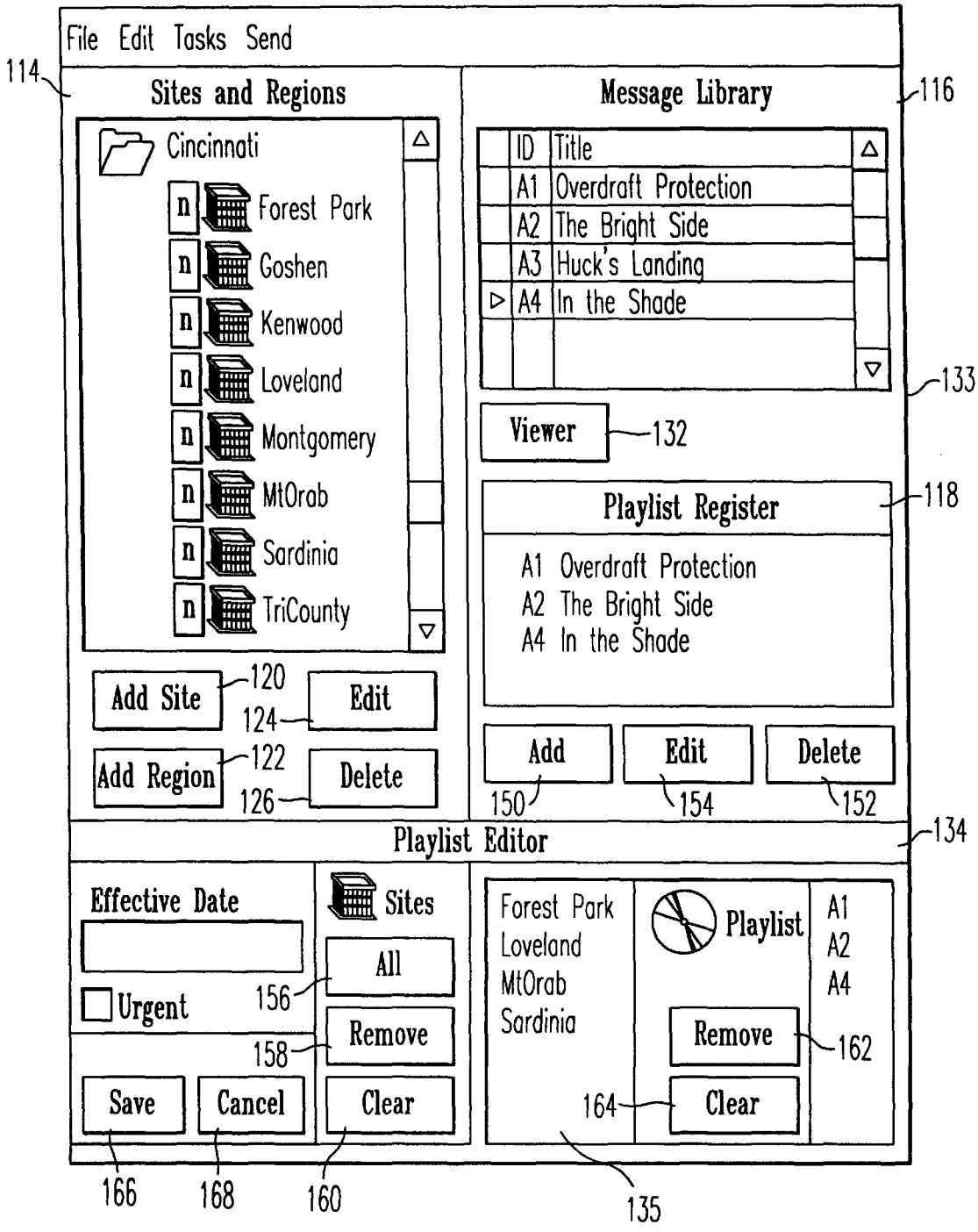

FIG. 23

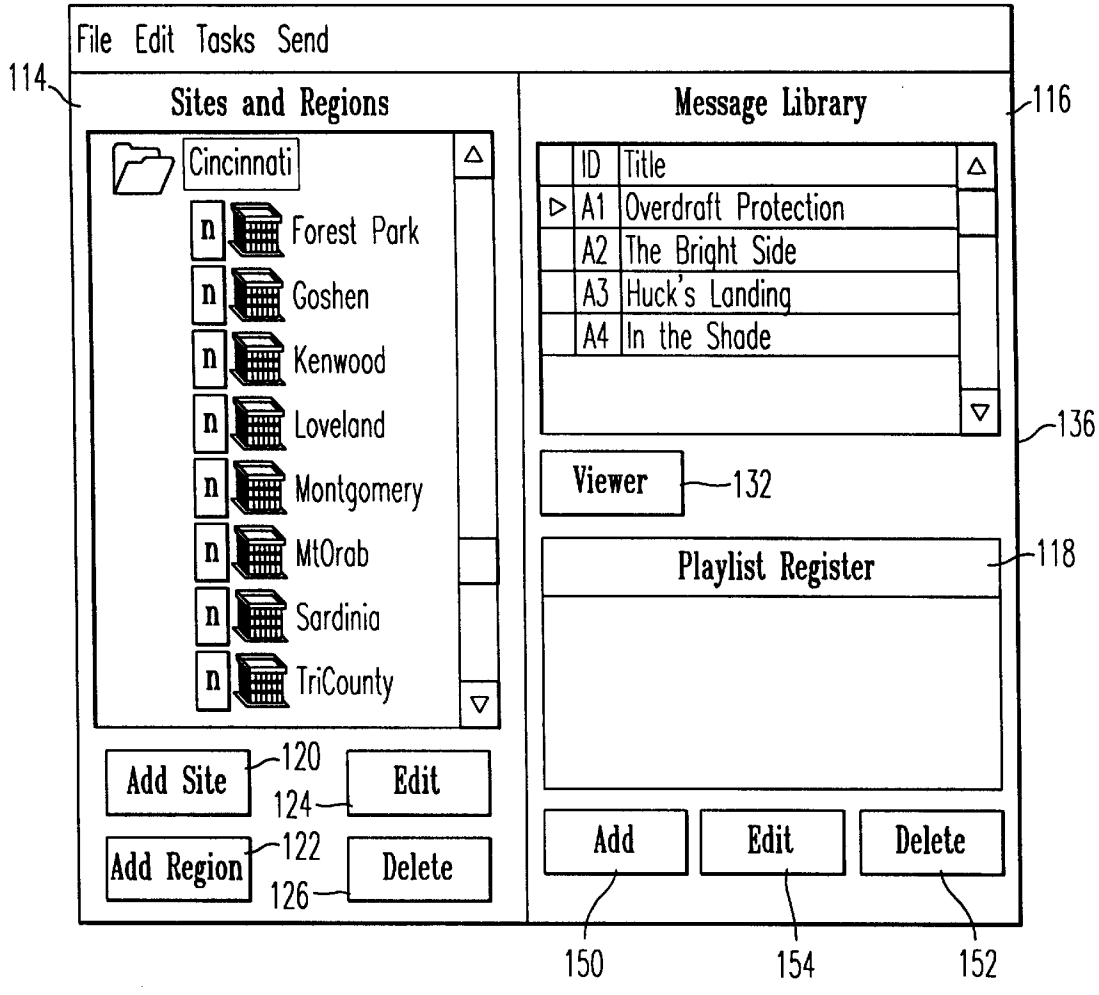

FIG. 24

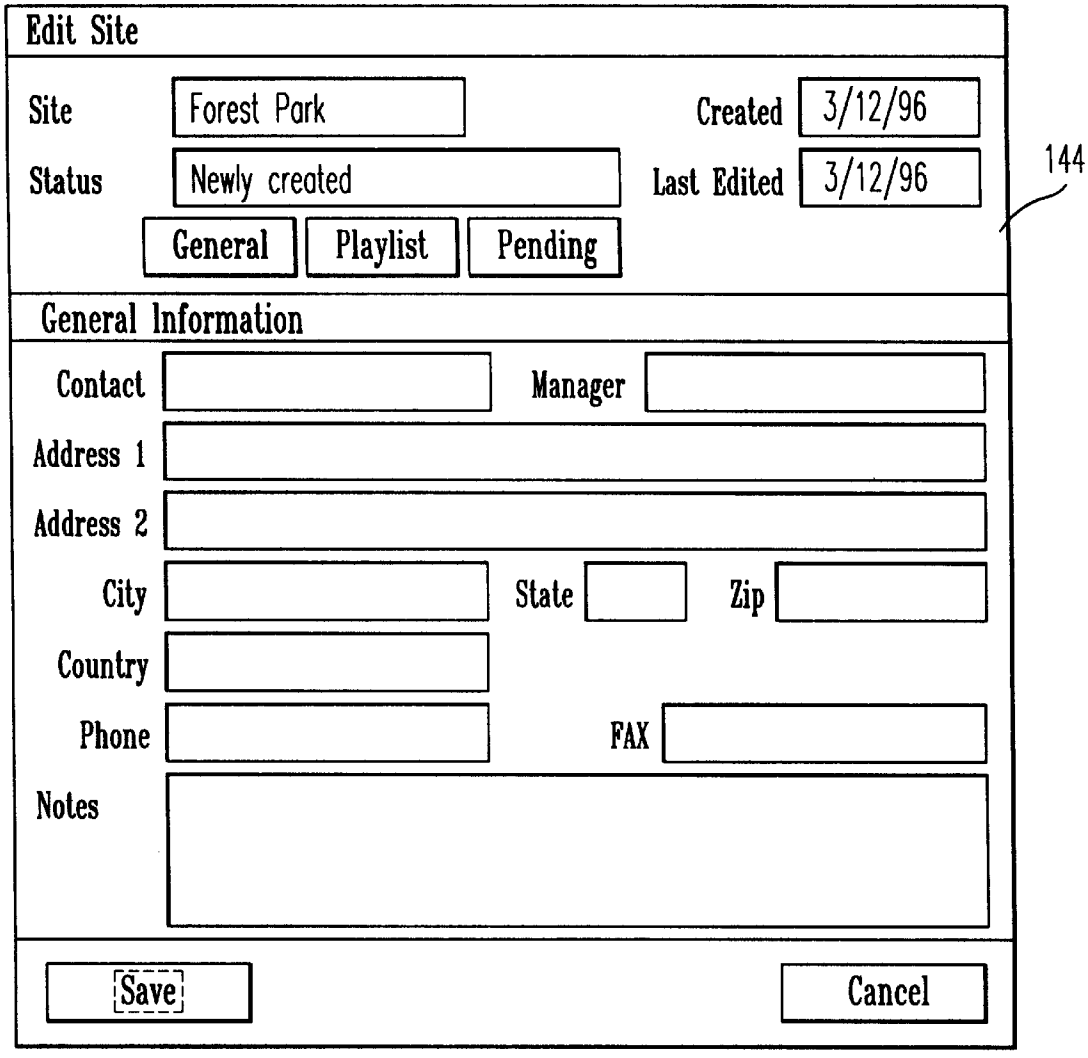
Edit Site
Site
Forest Park
Created
3/12/96
Status
Newly created
Last Edited
3/12/96
144
General
Playlist
Pending
General Information
Contact
Manager
Address 1
Address 2
City
State
Zip
Country
Phone
FAX
Notes
Save
Cancel

FIG. 26

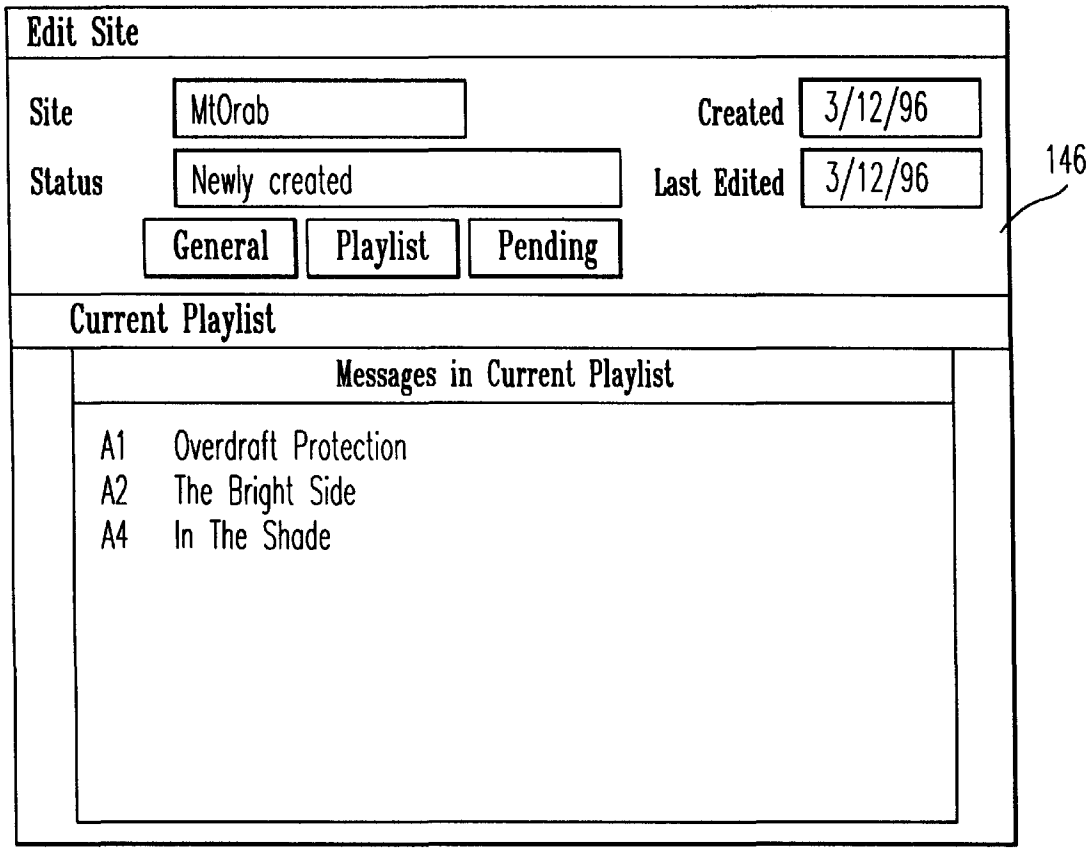

FIG. 27

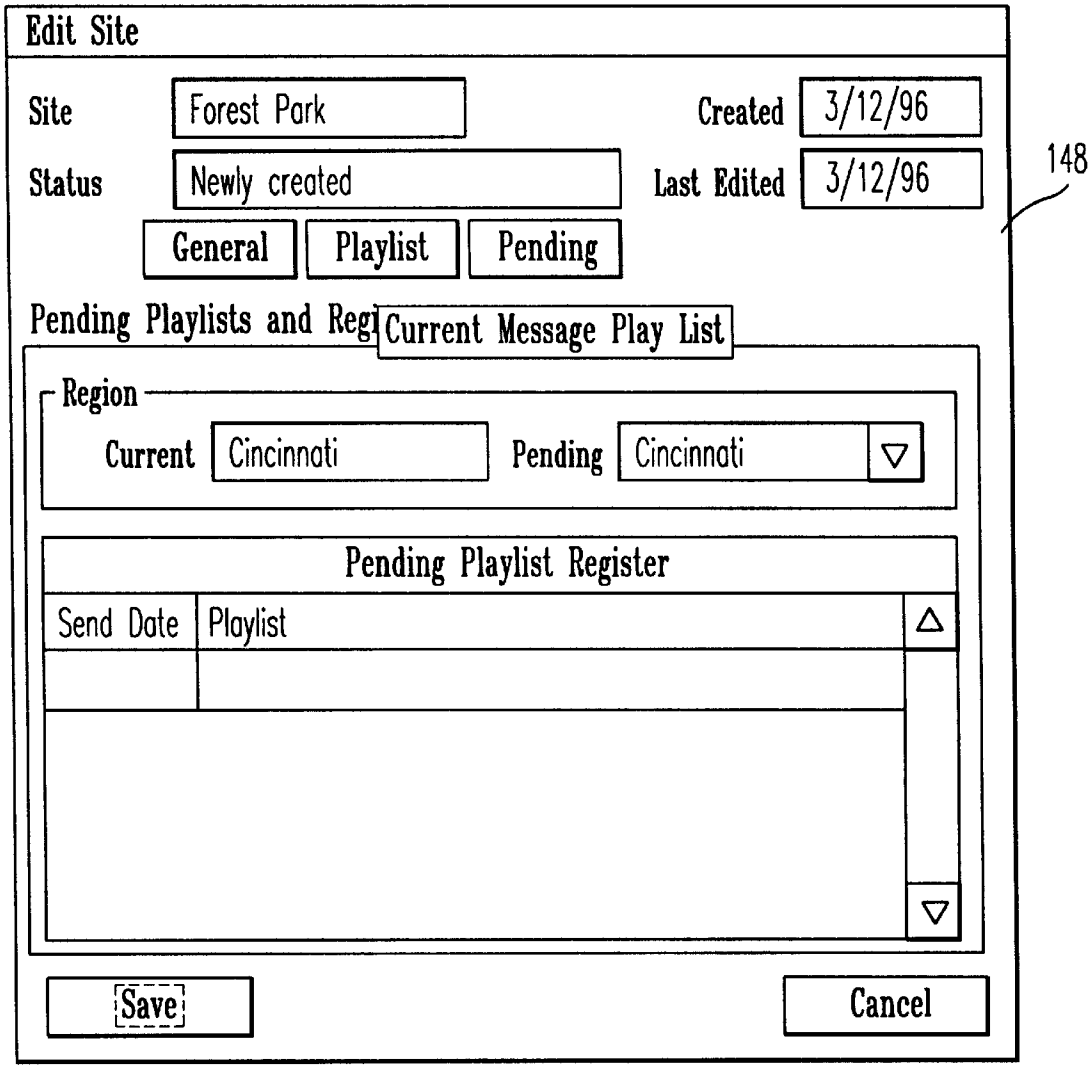

FIG. 28

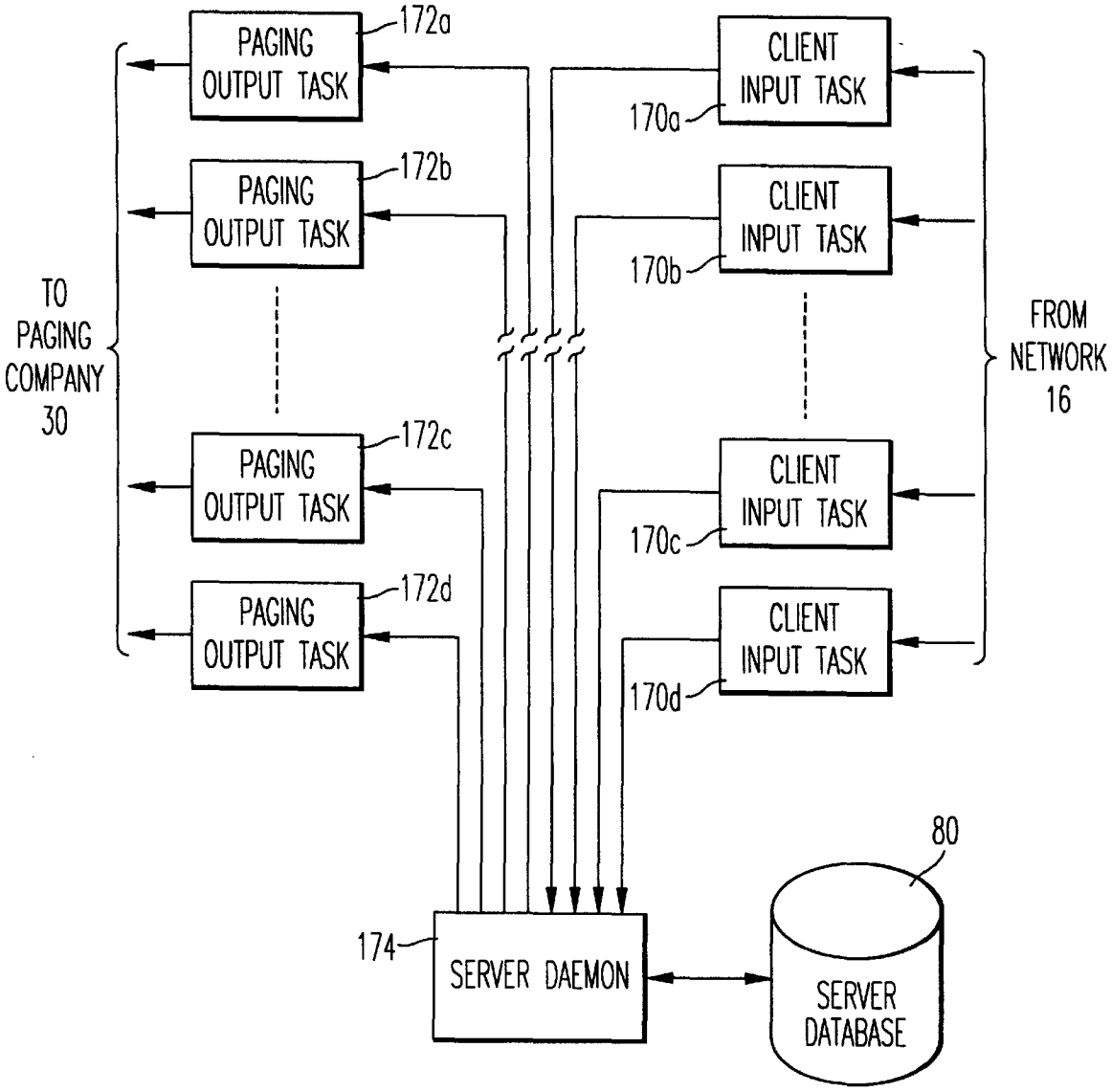
PAGING OUTPUT TASK
172a
PAGING OUTPUT TASK
172b
PAGING OUTPUT TASK
172c
PAGING OUTPUT TASK
172d
TO PAGING COMPANY 30
CLIENT INPUT TASK
170a
CLIENT INPUT TASK
170b
CLIENT INPUT TASK
170c
CLIENT INPUT TASK
170d
FROM NETWORK 16
80
174
SERVER DAEMON
SERVER DATABASE

FIG. 29

	Field	Definition
0	START	Sequence number
1	LEN	Length of packet (SEQ through SUM inclusive)
3	SEQ	Packet sequence
4	DATA	Message-specific data
	⋮	
2+*LEN*	CRC	CRC-16

FIG. 30

Field	Definition
ACCOUNT	Account number
PASS	Password
NEWPASS	New Password (optional)

FIG. 31

Field	Definition
SITEKEY	1st Site Key
⋮	
SITEKEY	Last Site Key

FIG. 32

Field	Definition
REGNKEY	1st Region Key
⋮	
REGNKEY	Last Region Key

FIG. 33

Field	Definition
LISTKEY	1st Playlist Key
⋮	
LISTKEY	Last Playlist Key

FIG. 34

Field	Definition
REGION	Region name
KEY	Region key
DESCRIP	Description
EDITDATE	ACCOUNT

FIG. 36

Field	Definition
SITE	Site name
KEY	Site key
SSTATE	Synchronization
MANAGER	Site manager
NREGKEY	Newly selected region (by Key)
ADDRESS1	Address line 1
ADDRESS2	Address line 2
CITY	City
STATE	State code
ZIP	Zip code
PHONE	Telephone number
FAX	FAX number
COUNTRY	Country
HOURS	Hours of operation
EDITDATE	Date of last change by user

FIG. 35

Field	Definition
LIST	Playlist name
SEQ	Playlist sequence
URGENT	Urgent flag
SITEKEY	1st Site key in Playlist
⋮	
SITEKEY	Last Site key in Playlist
SEP1	End of Site list
MCODE	1st Message code in Playlist
⋮	
MCODE	Last Message code in Playlist

FIG. 37

Field	Definition
KEY	Site Key
SSTATE	Synchronization

FIG. 38

Field	Definition
KEY	Region Key
SSTATE	Synchronization state

FIG. 39

Field	Definition
LIST	Playlist name
SEQ	Playlist sequence
URGENT	Urgent flag
SENT	Transmitted flag
SSTATE	Synchronization state
SITEKEY	1st Site key in Playlist
⋮	
SITEKEY	Last Site key in Playlist
SEP1	End of Site list
MCODE	1st Message code in Playlist
⋮	
MCODE	Last Message code in Playlist

FIG. 40

	Field	Definition
0	SEQ	Sequence number
1	LEN	Length of packet (SEQ through SUM inclusive)
2	DATA	Encoded Command Block
	⋮	
4+*n*	SUM	Checksum

FIG. 41

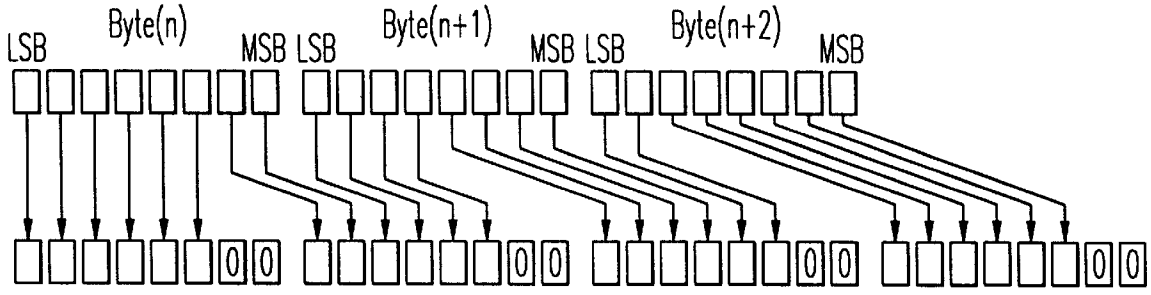

FIG. 42

	Field	Definition
0	START	STX character (02)
1	SEQ	Sequence number
2	LEN	Length of packet (FLAG through SUM inclusive)
3	DATA	Command Block
	⋮	
3+*n*	SUM	Checksum

FIG. 43

	Field	Definition
0	FUNC	Packet function (30h)
1	REGMASK	Region mask
3	TRACK(0)	First track number
4	TRACK(1)	Second track number
	n times	
3+*n*	TRACK(n-1)	Last track number

FIG. 44

	Field	Definition
0	FUNC	Packet function (31h)
1	ESN	Electronic serial number
3	TRKCNT	Number of tracks (n)
4	TRACK(0)	First track number
	TRACK(1)	Second track number
	n times	
4+*n*	TRACK(n-1)	Last track number

FIG. 45

	Field	Definition
0	FUNC	Packet function (50h)
1	ESN	Electronic serial number

FIG. 46

	Field	Definition
0	FUNC	Packet function (51h)
1	CAPCODE	Capcode #1 value

	Field	Definition
0	FUNC	Packet function (54h)
1	CAPCODE	Capcode #2 value

	Field	Definition
0	FUNC	Packet function (53h)
1	CAPCODE	Capcode #3 value

	Field	Definition
0	FUNC	Packet function (54h)
1	CAPCODE	Capcode #4 value

FIG. 47

	Field	Definition
0	FUNC	Packet function (56h)
1	REGNUM	Region number

FIG. 48

	Field	Definition
0	RESP	Packet response (00h)

FIG. 49

	Field	Definition
0	RESP	Packet response (02h)

FIG. 50

	Field	Definition
0	RESP	Packet response (02h)

FIG. 51

	Field	Definition
0	RESP	Packet function (30h)
1	ESN	Electronic serial number
	CAPCODE1	Primary Capcode
	CAPCODE2	Secondary Capcode
	CAPCODE3	Secondary Capcode
	CAPCODE4	Secondary Capcode
	FORMAT	Paging format
	GROUPNUM	Group number
	CDPTYPE	CD Player ID
	TRACKCNT	Number of tracks in track list
3	TRACK(0)	1st Track Number
4	TRACK(1)	2nd Track Number
	n times	
3+*n*	TRACK(n-1)	Last Track Number

FIG. 52

PROGRAMMABLE MESSAGING SYSTEM FOR CONTROLLING PLAYBACK OF MESSAGES ON REMOTE MUSIC ON-HOLD-COMPATIBLE TELEPHONE SYSTEMS AND OTHER MESSAGE OUTPUT DEVICES

FIELD OF THE INVENTION

The invention relates to a system for generating and transmitting message playlists to remotely located optical disc players for playing selected messages via a music on-hold-compatible telephone system or public address system.

BACKGROUND OF THE INVENTION

Many businesses use music on-hold-compatible (MOH) telephone systems to provide a customer with music or audio promotions of products or services while the customer is placed on-hold and waiting for assistance. A number of existing MOH telephone systems use tape players as the audio source. The promotional messages are recorded on endless loop cassette tapes. These systems are disadvantageous because the tapes are subject to wear, and the tape players are prone to mechanical malfunctioning. Messages are not modified (i.e., adding or deleting individual messages from a message playlist or modifying the sequence for playing messages on the playlist) because an individual message track cannot be accessed without first winding the tape forward or backward, respectively, past the succeeding or preceding message tracks. Thus, tapes requiring modification are usually discarded, and a new tape is purchased and recorded with messages in accordance with a new message playlist.

Another type of existing MOH telephone system eliminates the use of a tape player by downloading digitized audio messages onto an integrated circuit (IC) chip. The stored messages are played in a particular sequence that is repeated. While the number of moving parts that are subject to mechanical failure is reduced, the system is nonetheless disadvantageous because it is does not allow a user to program when an individual message is to be played or to add or delete a message from a playlist or modify the sequence with which the stored messages are played.

An improved MOH telephone messaging system is disclosed in U.S. patent application Ser. No. 07/999,592, filed Dec. 31, 1992, for ON-HOLD MESSAGING SYSTEM AND METHOD, the entire subject matter of which is hereby incorporated herein by reference for all purposes. The improved MOH telephone messaging system uses at least one optical disc player, such as a compact disc player (CDP), as the audio source. A CDP delivers improved sound quality and offers the ability to add or delete individual messages from a playlist and to change the play sequence of messages stored on an optical disc. For example, the CDP can be programmed to not play one or more of the stored messages at all. Thus, a message playlist can be altered without purchasing and recording a new message storage medium, unlike audio sources which use a cassette tape or an IC. The disclosed CDP-based telephone messaging system, however, is not remotely programmable.

SUMMARY OF THE INVENTION

In accordance with an aspect of the present invention, a remotely programmable message delivery system is provided which allows users to specify message sequences that are to be played at one or more remote sites via an MOH telephone system or other advertising device such as a public address system. The message delivery system comprises a communication link and a plurality of message playback devices, each of the message playback devices comprising a storage device for storing a plurality of audio messages. A computer remotely located from the plurality of message playback devices transmits control signals via the communication link for controlling at least one of the plurality of message playback devices. Each of the plurality of message playback devices is adapted to receive the control signals via the communication link. The computer is programmable to generate screens for guiding an operator to make choices selected from the group consisting of: which of the audio messages is to be played, which of the plurality of message playback devices is to play the selected audio message(s), which of a number of subsets of the plurality of message playback devices is to play the selected audio message(s), and the order in which multiple selected audio messages are to be played, and to generate control signals to implement these choices.

In accordance with another aspect of the present invention, the computer generates a screen displaying a location directory and a message directory. A user can select messages from the message directory for play at different remote sites selected from the location directory, as well as specify the sequence in which the selected messages are to be played at each selected remote site.

In accordance with yet another aspect of the present invention, the computer generates a location directory comprising the names of regions and the names of remote sites located in each of the regions. The computer is programmable to allow a user to add and delete remote site names in the location directory, as well as to create, modify and delete regions. The computer can generate a single command for a number of message playback devices located in the same region to play the same message playlist.

In accordance with still another aspect of the present invention, the computer is programmable to generate a screen which allows a user to select a message from the message directory and to display a full text script of the message.

In accordance with still another aspect of the present invention, the computer is programmable to generate control signals and provide them to a radiopaging company for transmission to the remote sites via radiopaging signals.

In accordance with still another aspect of the present invention, the system comprises a plurality of computers configured as client computers, and a central computer with which all of the client computers communicate via a communication link. The central computer receives data from the client computers relating to user choices for message playlists at selected remote sites and transmits the data to the remote sites via the same or another communication link. The central computer can communicate with a radiopaging company to transmit the data via radiopaging signals.

In accordance with still another aspect of the present invention, the message playback devices each comprise a compact disc player and a receiver circuit for receiving radiopaging signals transmitted by via a radiopaging company. The receiver circuit recognizes radiopaging signals directed to it and commands the compact disc player to play the message tracks specified in the radiopaging signals at the time and in the sequence requested by the client computer from which the message playlist data for the radiopaging signals originated.

BRIEF DESCRIPTION OF THE DRAWINGS

These and other features and advantages of the present invention will be more readily apprehended from the fol-

lowing detailed description when read in connection with the appended drawings, which form a part of this original disclosure, and wherein:

FIG. **1** is a schematic block diagram of a remotely programmable messaging system constructed in accordance with an embodiment of the present invention;

FIG. **2** is a schematic block diagram of a message playback device constructed in accordance with an embodiment of the present invention and connected to a conventional MOH telephone system;

FIG. **3** is a schematic block diagram of a client computer constructed in accordance with an embodiment of the present invention;

FIG. **4** is a schematic block diagram of a server in a remotely programmable messaging system constructed in accordance with an embodiment of the present invention;

FIG. **5**, **6**, **7**, **8**, **9**, **10**, **11**, **12**, **13**, **14**, **15**, **16**, **17** and **18** are tables for storing data in a distributed database constructed in accordance with an embodiment of the present invention;

FIGS. **19**, **20**, **21**, **22**, **23**, **24**, **25**, **26**, **27** and **28** are screens generated by a client computer for guiding a client to enter message playlist data in accordance with an embodiment of the present invention;

FIG. **29** is a schematic block diagram illustrating software modules in a server constructed in accordance with an embodiment of the present invention;

FIG. **30** depicts the format of a packet transmitted between a client computer and a server in accordance with an embodiment of the present invention;

FIG. **31**, **32**, **33**, **34**, **35**, **36**, **37**, **38**, **39** and **40** illustrate fields in different packets transmitted between a server and a client computer in accordance with an embodiment of the present invention;

FIG. **41** illustrates the format of a packet transmitted between a server and a message playback device in accordance with an embodiment of the present invention;

FIG. **42** is a diagram depicting an encoding process in accordance with an embodiment of the present invention; and

FIGS. **43**, **44**, **45**, **46**, **47**, **48**, **49**, **50**, **51** and **52** illustrate fields in packets transmitted between a server and a message playback device in accordance with an embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

FIG. **1** depicts a message delivery system **10** for remotely controlling the playback of messages at a number of remote sites via message playback devices. The term "message" used herein refers to music, advertisements or other recorded audio signals which can be played for a person whose telephone call has been answered by a MOH telephone system. In addition, the system **10** can be configured to program remote, multimedia message playback devices, in which case a message can comprise video or other data, as well. The system **10** comprises at least one central administrative computer **12** hereinafter referred to as a server. The server **12** receives message playback data, including sequences of selected messages (hereinafter referred to as playlists) that originate from a number of client computers **14***a* and **14***b*, and uses the message playback data to command message playback devices **24** at selected remote sites to play selected messages. Thus, message playback data can comprise identification of selected remote sites at which the messages are to be played, as well as other data such as effective dates for playlists (i.e., the dates on which the server **12** actually transmits the playlists to the message playback devices). Two computers **14***a* and **14***b* are shown for illustrative purposes, although more client computers can be used in the system **10**. The system **10** can comprise more than one server **12**, for example, if the amount of data received from the computers **14** exceeds the processing capability of a single server **12**. The server **12** and the client computers **14** are preferably IBM-compatible personal computers (PCs), although other platforms such as UNIX and Macintosh can be used. The computers **14** are adapted to communicate with the server **12** via a communication network **16** such as a public switched telephone network (PSTN). The network can also be a private network with a private branch exchange (PBX), a radiopaging network, an optical fiber network, a microwave network, a satellite network, and the like.

The computers **14** are used by clients to enter information relating to the generation of messages at one or more remote sites. As shown in FIG. **1**, three remote sites **18**, **20** and **22** are each provided with one or more message playback devices **24***a*, **24***b*, **24***c* and **24***d*, respectively. For example, a first client can be a bank which uses the computer **14***a* to send message playlists and other information to bank branches located at sites **18** and **20**, respectively. A second client can be a product distributor which uses the computer **14***b* to send message playlists to a regional office at site **22**. The system **10** allows a client to define regions such as regions A and B indicated at **26** and **28**, respectively. Region A **26** is shown as a region consisting of noncontiguous geographical areas **26***a* and **26***b* for illustrative purposes. Thus, a message playlist can be sent to message playback devices **24***a*, **24***c* and **24***d* at sites **18** and **22** if region A **26** is specified, or to message playback devices **24***a* and **24***b* at sites **18** and **20** if region B **28** is specified. The ability to define regions is advantageous because multiple sites with similar programming requirements (e.g., sites in the same geographical area or sites performing the same customer service function) can be programmed by specifying a single playlist at one of the computers **14**.

As shown in FIG. **2**, each message playback device **24** is preferably provided with a compact disc (CD) or discs **35** on which messages have been recorded. Messages, however, can also be stored and distributed on other storage media such as an integrated circuit or a magnetic disk. Accordingly, the message playback devices **24** can be configured in accordance with the present invention to access different types of storage media and discrete, individual messages stored thereon. Businesses and other concerns employing the system **10** request certain messages which are recorded and then written to optical discs. The optical discs are then distributed to each remote site associated with these businesses and installed at each corresponding message playback device **24**. The frequency with which the discs are distributed can vary, depending on the needs of the businesses to update message data. The discs for a business are preferably identical at each message playback device **24**.

The discs can comprise several related messages, which differ only by reference to a different season or recurring event or interest rate, for example. Users can therefore select the appropriate message(s) when necessary and thereby reduce the frequency of updating the discs with new messages and then distributing them. For example, a manager for a chain of five retail stores can program message playback devices at each of the stores to alternately play messages C**1** and C**2**, which correspond to announcements for everyday discount prices at 10% off list price and regular

store hours and locations, respectively. During a sale, the manager can change the playlist to include messages C1 and C3, that is, a message announcing 30% savings during the sale event. At the end of a calendar year, the manager can modify the playlist to include messages C3 and C4 corresponding to announcements for extended business hours and 50% savings. Messages C1, C2, C3 and C4 can all be recorded onto the CDs **35** in advance and programmed for play as needed. When a user (e.g., the manager) creates a playlist, the client computer **14** is programmed to prompt the user to specify an effective date, that is, the date after which the server **12** can transmit a command to play the messages on the playlist to the intended remote sites. Thus, a user can modify a playlist (e.g., replace a message on a playlist with another message from a CD **35**) in advance of the actual date after which the other message is intended to be played at a remote site (e.g., in advance of a sale date).

The computers **14** transmit the message playlists and other information pertaining to selected remote sites **18**, **20** or **22** to the server **12**. The playlists comprise, for example, the identification codes (e.g., C1, C2, and so on) of selected messages on the CDs that a business wishes to have played, the sequence with which the selected messages are to be played, and the remote sites for which a playlist is intended. The identification codes are preferably alphanumeric codes. The server **12**, in turn, generates control signals for the message playback devices at the selected remote sites to play the selected messages. In accordance with the present invention, the server **12** converts message identification codes from playlists received from the computers **14** into corresponding track numbers on the CDs which are incorporated into the control signals. For example, the server **12** determines a track number corresponding to a message on a playlist by consulting a track legend stored in a memory device **74** of FIG. **4** (e.g., tables **94** and **96** described below in connection with FIGS. **11** and **12**). The track legend stores the track numbers on the disc(s) **35** and the unique identification codes corresponding to respective messages. The track numbers of a particular message can vary among the CDs at the different remote sites.

The server **12** preferably transmits control signals comprising playlists to a subcarrier radiopaging company **30** for radiopaging the remote message playback devices **24** via a communication link **31**. Other types of communication links **31**, however, can be used such as a satellite communication link, a microwave link, a PSTN, an optical fiber network or other communications link. Further, the server **12** can communicate with the radiopaging company **30** via the communication link **16** or another communication link **17**.

With reference to FIG. **2**, each message playback device **24** preferably comprises an optical disc player **32** (e.g., a CDP), and a receiver circuit **34** which is adapted to process control signals transmitted via the communication link **31** into command signals for the optical disc player **32**. The optical disc player preferably comprises a speaker output or other output **41** which is connected to at least one advertising device such as a MOH telephone system **44**, a public address system **45**, and a visual display device (e.g., an electronic sign) **47**. The receiver circuit **34** can be implemented on a circuit board (not shown) mounted inside the chassis of a commercially available optical disc player. The optical disc player **32** can be, for example, a Model CDP-297 compact disc player available from Sony Corporation of America, Park Ridge, N.J. The optical disc player **32** comprises a disc carousel **36**, cartridge or retractable shelf adapted to receive one or more optical discs **35**, an optics system **38** for reading data from an optical disc, an audio output circuit **39** for generating audio signals from signals received from the optics system **38** and providing the audio signals to a speaker output **41**, and a controller **40** for controlling the CDP components **36**, **38** and **39**.

As stated previously, the optical disc player **32** can be connected to a conventional MOH telephone system **44** having on-hold messaging capabilities such as the Merlin System Model 1030 manufactured by AT&T, Parsippany, N.J., or the Electra Mark II Series telephone system with Model TSW-E circuit card manufactured by NEC America, Melville, N.Y. It is to be understood, however, that the telephone system **44** can also be a PBX or other type of telephone system such as an automated telephone answering system. An optional audio amplifier **42** (e.g., a Model 1701 amplifier manufactured by University Sound, Inc., Sylmar, Calif.) can be connected between the optical disc player **32** and the MOH telephone system **44**, if their respective output signal levels are different, to improve the volume level and clarity of the audio signals heard by callers accessing the MOH telephone system **44** via a communications network **46** and telephones **48** or other telecommunications access devices. The network **46** of FIG. **2** and the network **16** of FIG. **1** are preferably the same PSTN.

With continued reference to FIG. **2**, the receiver circuit **34** preferably comprises a microcontroller **50** programmed in accordance with the present invention, a receiver **52** and an antenna **54**. The receiver **52** is adapted to demodulate signals (e.g. radiopaging signals) received from the communications link between the server **12** and the message playback devices **24** (e.g., via the radiopaging company **30**). The demodulated signals are preferably stored in a non-volatile memory device **55**. The microcontroller **50** decodes the stored signals and converts them into command signals for the controller **40**. The controller **40**, in turn, controls the optical disc player **32** to queue up tracks corresponding to selected messages in the playlist for playing. In accordance with another embodiment of the invention, the system **10** can be configured with a single computer **14** and no server **12**. For example, the computer **14** can be located in an office within a building and connected directly to one or more message playback devices **32** in the building such as a public address system **45** and a number of signs **47** via a wireline communications link (e.g., a local area network) and modem **53**.

While the system **10** is described for use with a MOH telephone system **44** to accommodate customers awaiting assistance via telephones **48**, the system **10** can be adapted to provide remote programmability for other types of audio and multimedia message delivery equipment such as a programmable public address system **45**, an electronic sign **47** or a videoconferencing device **49**. The optical disc player **32** can be configured as a multimedia device having a video output device **49** for processing data accessed from the CD(s) **35**. For example, messages can include video commercials for a videoconferencing device **49** at a remote site having a corresponding audio message on the speaker output **41**, or a still picture (e.g., a picture of a client's business premises) that is useful with different audio messages. The videoconferencing device can receive multimedia messages directly from the multimedia optical disc player **32** or from the MOH telephone system **44**.

Thus, in accordance with the present invention, each message playback device **24** at the remote sites **18**, **20** and **22** can be programmed by users operating at least one of the computers **14***a* and **14***b* to play messages stored on optical disc(s) **35** on a MOH telephone system **44** or other advertising device having a speaker or display device. Further, the

system **10** simplifies the process of selecting message playlists and allows a system user to more effectively maintain a promotional program for customers placed on-hold, or in the broadcast area of a public address system, in view of a programmable display or operating a multimedia computer.

With reference to FIG. **3**, each client computer **14** comprises a central processing unit (CPU) **56** (e.g., a microcontroller), a memory device **58**, a display device **60** such as a video monitor, and at least one input device **62** such as a keyboard and preferably also a mouse. The computer **14** communicates with the server **12** in a manner described below via a modem **64** and a universal asynchronous receiver/transmitter **66**. Similarly, as shown in FIG. **4**, the server **12** comprises a CPU **68**, an input device **70**, a display device **72**, and a memory device **74**. The server **12** comprises a network interface **76** to communicate with other devices via the network **16**. The server **12** is depicted in FIG. **4** as being connected via PSTN **16** to client computers **14***a*, **14***b* and **14***c* and to paging companies **30***a* and **30***b* for illustrative purposes.

The system **10** software will now be described with continued reference to FIG. **4**. The system **10** preferably employs a distributed database to manage information relating to the system **10** configuration, the paging companies **30***a* and **30***b*, capcodes for radiopaging signals, hardwired line connections, the histories and configuration of each message playback device **24**, client accounts, among other aspects of the system **10**. The distributed database comprises a number of local or client databases **78** and a server database **80** maintained by the server **12**. The server database **80** is synchronized with each of the client databases **78** in a manner described in further detail below. The server database **80** preferably stores records corresponding to the records maintained at each of the client computers **14**. Since database changes (e.g., deletion of a message from a previously transmitted playlist) are generally initiated by clients via the client computers **14**, the client databases do not overlap. Thus, record level arbitration is minimal.

In accordance with an embodiment of the present invention, the records in the distributed database are organized as a number of tables. The server database **80** preferably manages all of the tables, and each of the client databases **78** stores a subset of the tables, that is, those tables that are pertinent to that particular client. The distributed database can be created using, for example, the ACCESS 2.0 relational database architecture developed by Microsoft Corporation, Redmond, Wash.

Each client maintains its client database **78** via its client computer(s) **14**. In other words, a client can use more than one computer **14** to access the server **12** if there is equipment (e.g., a client server (not shown)) to arbitrate client database modification requests generated by different client computers. The individual client databases **78** maintain records of messages, regions, remote sites and playlists pertaining to that particular client. A client database **78** can also be maintained for more than one person and/or business entity if those persons or businesses communicate with the server **12** using the same computer(s) **14** and client database **78**.

The server **12** is preferably implemented as a set of applications on the CPU **68** and operates as a dedicated computer. In addition, the server **12** preferably operates as a communications hub in the network **16**, establishing connections with the computers **14** to receive database changes therefrom and to synchronize the server database **80** to the client databases **78**. Synchronization involves downloading database changes from each client database **78** to the server database **80**. The server **12** then organizes the database changes into control signals which are sent to the paging companies **30***a* and/or **30***b* for broadcast to the message playback devices **24**. The server **12** also performs administrative functions such as maintaining paging accounts and client billing.

The system **10** is preferably implemented using a demand-based client-server architecture to optimize telephone connect time during the synchronization process. A user can preferably access the client application at the computer **14** at any time. The client application, however, preferably must receive a log-on request message from the server **12** after a connection is established to begin synchronization. Thus, to optimize the call connection, the client computer **14** is not connected to the server **12** while the user is making changes to the client database. Once all of the database changes have been entered at the computer **14**, the user can establish a call connection and synchronize with the server **12**.

The client computers **14** are each preferably programmed using an on-demand, WINDOWS™-based client application on the CPU **56** which allows users to define remote sites, regions and message playlists. Each client database **78** comprises data relating to the identification codes corresponding to each message on the optical discs, the playlist currently in use at each remote site associated with the corresponding computer **14**, alternate playlists (e.g., playlists having future effective dates), and data relating to each site and region associated with the corresponding client(s), among other data. Each computer **14** is also programmed to provide a graphic user interface by generating screens on the display device **60** for guiding a client when making changes to the client database **78** (e.g., defining a new site, region or playlist or modifying existing records). A number of the screens are described below in connection with FIGS. **19–28**. The screens are created in a conventional manner using, for example, the relational database software such that data entered into the fields on the screens are processed and stored to tables and are otherwise used to generate message playlists.

Database tables will now be described with reference to FIGS. **5–18**. The server database **80** comprises administrative tables that are specific to the server **12**. For example, at least one table **82**, as shown in FIG. **5**, is stored in the server database **80** for each of the message playback devices **24**. The configuration tables for the message playback devices **24** comprise a number of fields such as customer account number, an electronic serial number uniquely identifying that particular message playback device, at least one field specifying the regions in which that message playback device operates, a broadcast method number (BMN), and preferably one or two other fields with auxiliary BMNs, model and firmware identification numbers corresponding to the message playback device hardware and software, respectively, dates indicating when the message playback device configuration was last programmed and when the status of the message playback device was last read. In addition, the respective tables **82** for the message playback devices **24** are programmed to store information regarding successful transmission statistics, as well as fields for indicating total number of pages received, total number of corrupted pages, as well as total number of pages transmitted. A server port table **84** is depicted in FIG. **6** for storing data relating to ports used by the server **12**.

A number of administrative tables are shared between the server database **80** and each of the client databases **78**, such as a customer account table **86** (FIG. **7**), a site table **88** (FIG.

8), and a region table **90** (FIG. **9**). The customer account table **86** comprises fields for storing information such as customer account number, current and previous passwords, biographic information such as customer name, address, telephone number, facsimile number and contact name. Further, the customer account table **86** can comprise information such as name of the sales representative serving the customer and the dates on which the customer account table was created and last modified.

The site table **88** preferably comprises fields for storing information such as customer account number, site name and key, a synchronization code, site address, site manager name, an electronic serial number for the message playback device **24** serving that site, hours of operation, telephone and facsimile numbers, as well as dates on which a site table was created for a particular location and when the site table was last edited.

The site table **80** preferably contains information relating to a single site. Each site preferably specifies the location of a single message playback device **24**. Synchronization codes are described with reference to FIG. **10**. In order to reflect the state of tables or records in a client database **78**, and records on the server **12** during synchronization, shared records are provided with a SSTATE field. The SSTATE field is provided with a value, as shown in the table **92** in FIG. **10**, by the CPUs **56** or **68**, depending on the transaction occurring between a client computer **14** and the server **12**.

A region table **90** relates a local region name to a broadcast method. A region table **90** preferably comprises fields such as customer account number, region name, key, and status, a broadcast method number, a region number, a description of the region, as well as dates on which the region table was created and last modified.

In addition to administrative tables, the server and client databases **78** and **80** share message tables. Each message in the system **10** is preferably defined using two tables, that is, a message table **94** (FIG. **11**) and a track correction (TCOR) table **96** (FIG. **12**). The message table **94** defines a message currently in existence for a particular customer account. The TCOR table **96** provides per-site track translation to allow for the use of nonstandard compact discs used at the various sites. Unlike the customer account, region and site tables **86**, **90** and **88**, changes to message tables **94** are created at the server **12** and approved by clients. The synchronization status fields in these tables **94** and **96** therefore have different definitions, as indicated in the table **98** in FIG. **13**. A synchronization status field in the message table can be provided with one of preferably five different status indicators (e.g., an integer number or other code) to indicate: (1) that a message has been entered into the server database **80** and needs to be sent to the client computer **14**; (2) that a message has been downloaded to the client for approval; (3) that the message has been approved by the client; (4) that the message has been changed in the server database **80** and needs to be presented to the client; and (5) that the message has been approved in the client database **98** but the server needs to be notified.

In addition to the synchronization status field, a message table **94** comprises fields for storing information such as a customer account number, a message code which uniquely identifies that message, a descriptive title for the message, an indication of whether or not the message is a signature track, a library CD number and track number, a code for indicating whether or not the message was created using a mail or female voice, a field for storing the text of the message for generation if desired on a client computer screen **60**, introduction time in seconds, reading time in seconds and trailer time in seconds, and the date on which the message was recorded. Entries in the message tables specify actual audio tracks on compact discs located at sites, as well as on the account library compact disc set. The unique message codes in the message tables preferably consist of a single letter followed by a number. The letter "S" preceding a message code indicates that the message is a signature track which is characterized by an additional signature index. The signature index allows, for example, intuitive representation of a single track which is used differently for different sites. The message code preferably comprises 32 bits, that is, an eight bit binary code for representing one of the letters A through Z, eight bits to denote the message number, and an additional eight bits to indicate the signature index. The remaining bits are preferably zeroes. When playlists are processed, the signature index is ignored.

The track correction table **96** provides a correction for terminated or otherwise misplaced tracks on a per-site basis. If a record exists for a particular site and a particular message, the specified correction in the table **96** overrides a track field in the message record; otherwise, a track assignment field in the message table **94** indicates that the message is an uncorrected track.

The system **10** preferably uses regions to describe broadcast coverage. The physical aspects of broadcast coverage, however, are described by a paging carrier, a capcode, and a region selector. The translation between the physical coverage model and the region model is defined by a broadcast method table **100** (FIG. **14**) and a carrier table **102** (FIG. **15**). The broadcast method table loo preferably comprises fields for storing broadcast method number, carrier key, a per-site identification number or PIN, a capcode, a format code, a frequency, a bandwidth and a coverage region. The broadcast method table **100** provides a relationship between a broadcast method and particular paging account for the system **10**. The paging carrier table **102** preferably comprises fields for storing carrier name, carrier key, input format code, telephone number or computer on-line address, modem initialization string, ixo/TAP response and maximum packet size.

A playlist transmitted from a client computer **14** to the server **12** comprises a list of messages and a list of destinations which are represented in three related tables, that is, a playlist root table **104** (FIG. **16**), a playlist message table **106** (FIG. **17**) and a playlist site table **108** (FIG. **18**). The tables are related using a sequence field. The sequence field in the playlist message table **106** and the playlist site table **108** comprises a command sequence identification code. The sequence field in the playlist root table **104** comprises a playlist sequence number. The other fields in the playlist root table are customer account, number, playlist name, a flag to indicate whether or not the playlist is urgent, a date on which to send the command to play the message playlist to the message playback devices **24**, a creation date, a date indicating when the playlist root table **104** was last modified, a scheduled transmission date (i.e., a date that indicates when the playlist is transmitted, as opposed to when the message playback device **24** provides the compact disc player with the command to begin use of the playlist), and a synchronization status field.

The playlist message table **106** comprises fields for storing message codes for each of the messages in the playlist, as well as data indicating the relative position of the messages in the playlist according to a position or POS field. Messages characterized by lower POS values are played before messages having higher POS values. Further, if the

message code specifies a signature track, then a message from a custom table is played; otherwise, the message code field specifies a message in the message table.

The playlist site table **108** comprises data relating to customer account, site key and site flag in addition to the comment command identification in the sequence field. The playlist site table **108** indicates progress of playlist transmission and stores a history of commands to determine which commands are sent to what sites. When a playlist is created, a client specifies which sites are to receive it. The set of sites is converted into multiple entries in this table **108** which describe the actual transmissions that are intended to reach all sites. The entries in the playlist site table **108** are provided to the server **12** during the synchronization process. When the server **12** transmits the command (i.e., message track numbers and site numbers for message playback devices **24** destined to receive the command), the server **12** scans through all of the playlist site table entries. The server **12** proceeds to prepare signals for transmission to each of the sites listed in the playlist site table. Following transmission, the server **12** changes the SENT field in the playlist site table **108** to a value corresponding to the condition "true". Further, the server **12** changes the SENT field in all other records related to the transmission to a value corresponding to "true", as well.

The client application on each of the computers **14** is programmed to generate a number of screens to guide a client through the process of generating message playlists, as well as modifying existing playlists for transmission to sites and regions. The client application allows a client to describe relationships between sites, regions, messages and playlists in graphical terms which are then recorded in the client database **78**. A number of the screens are depicted in FIGS. **19–28**. As shown in FIG. **19**, a client computer is programmed to generate a log-on screen **110** which prompts the client to enter an account number and a password. Once a valid password is entered, the computer **14** is programmed to generate a main window screen **112**, as shown in FIG. **20**.

The main window screen **112** is divided into three areas **114**, **116** and **118**, entitled Sites and Regions, Message Library and Playlist Register, respectively. The Sites and Regions area **114** shows a tree list representing regions as folders. Sites are represented as small buildings, as described below in connection with FIG. **24**. Sites are displayed when their corresponding region is double-clicked open using a mouse, for example. Four buttons **120**, **122**, **124** and **126** in this area **114** allow the client to add, delete and edit regions (e.g., regions **26** and **28**) and sites (e.g., **18**, **20** and **22**). The Message Library area **116** shows a list of all of the messages available to the client, along with message titles and message codes. Double-clicking on any message in the list or clicking on the viewer button **132** opens a corresponding message viewer screen (e.g., screen **128** or **130** which are shown in FIGS. **21** and **22**). A message viewer screen allows the client to view message parameters, to play a message on a CD-ROM at the computer **14** if the computer **14** is provided with an optional CD drive **131** (FIG. **3**) and sound card (not shown), and to accept the message for playback from CDs located at selected remote sites. Finally, the Playlist Register area **118** indicates all pending playlists, as well as a history of playlists transmitted to the remote sites. Double-clicking on a pending playlist converts this area **118** into a Playlist Editor area **134**, as shown in screen **133** of FIG. **23**.

With continued reference to FIG. **20**, if one of the region names (e.g., Cincinnati) in the area **114** is highlighted, the computer generates a screen **136**, as shown in FIG. **24**, which lists all of the sites associated with that region (e.g., Forest Park, Goshen and so on). With reference to FIG. **25**, the client can specify certain parameters relating to a region by depressing the button **122** on screen **136** to obtain the screen **138**. Because a region is preferably an abstract entity with most of its details managed by the server **12**, in accordance with an embodiment of the present invention, the client is preferably limited to changing region name and description in fields **140** and **142**, respectively. On the other hand, a client preferably has more latitude to edit data relating to a site, as indicated in FIGS. **26**, **27** and **28**. The screens **144**, **146** and **148** depicted in these Figures illustrate how a client can enter biographical data regarding a site, the sequence of messages in a current playlist at a particular site, and a list of pending playlists and their effective dates (e.g., send dates).

With reference to FIG. **21**, the message viewer screen **128** or **130** allows a client to preview the text or message copy, introduction, read and trail times of the message, whether or not the message was generated using a male or female voice, as well as the title and message code corresponding to that message. As stated previously, the message viewer screen **128** or **130** can be used to review messages currently available on CDs distributed to remote sites, and new messages received from the server **12** for release approval.

With reference to FIG. **20**, by clicking the "add" or "delete" buttons **150** and **152**, the client can add or remove a playlist from the Playlist Register area **118**. By clicking the "edit" button **154**, or double-clicking the playlist name in the area **118**, the client can obtain the screen **133** in FIG. **23**. The Playlist Editor area **134** indicates whether or not a playlist has an effective transmission date, the sites at which the playlist is to be played, as well as the messages in the playlist. Sites can be specified by dragging them on the display **60** via a mouse or other input device **62** from the Sites and Regions area **114** to the site editor area **135**. Alternatively, the "All" button **156** can be clicked to automatically list all sites in the region highlighted in the area **114**. Messages can be selected by clicking them in the Message Library area **116** or on the message viewer screen (e.g., screen **128** or **130**). "Remove" and "Clear" buttons **158**, **160**, **162** and **164** are provided to remove selected ones or all of the sites and messages in the Playlist Editor area **134**. The entries in the Playlist Editor area **134** can then be saved or canceled by clicking the "Save" button **166** or the "Cancel" button **168**, respectively. The computer **14** is programmed via the client application to initiate a telephone call via its modem to the server **12** to relay the sites and regions configuration or playlist register data thereto. The telephone call is preferably initiated at midnight on the day that the "Save" button was depressed. If the "Urgent" button is clicked, the telephone call is initiated immediately after the "Save" button is clicked.

The operation of the server **12** will now be described with reference to FIG. **29**. The server **12** is the data interchange point of the system **10**. The server **12** accepts calls from client applications at corresponding computers **14** and generates control signals for the radiopaging company **30** or other communication link. The server **12** transmits the control signals to remotely located message playback devices **24** having optical disc players **32** and one or more compact discs containing messages to control which of the messages are played and when they are played. The server **12** also collects billing information and maintains customer accounts with each client. The server **12** is programmed to perform client input tasks **170***a*, **170***b*, **170***c* and **170***d* which are preferably perpetual tasks that monitor a particular port

on the server **12** for incoming calls from client computers **14**. Four client input tasks are shown for illustrative purposes and shall be collectively referred to using reference numeral **170**. The server **12** performs paging output tasks **172***a*, **172***b*, **172***c* and **172***d* which run on-demand, passing data packets to a paging company **30** for broadcast as radiopaging signals in such protocols as TNPP, TAP/ixo and SNPP. Similarly, four exemplary tasks are shown and shall hereinafter be collectively referred to as tasks **172**. The server **12** is programmed with a daemon **174** which analyzes changes made to the database **80** by client input tasks **170**, and sends packets to paging output tasks **172** to relay programming information to the remote message playback devices **24**.

The client input tasks **170** can control a serial I/O port, a TCP/IP port or other communications interface, and are operable to accept calls from client applications on computer **14**. The dialog between client input tasks **170** and client applications is preferably performed using a custom data transaction protocol (DTP), which is described below. When communicating with a client computer **14**, each of the client input tasks **170** at the server **12** operates as a server, and the client application for that computer **14** operates as a slave. Communication is based on transactions which are initiated by one of the client input tasks (e.g., task **170***a*) and responded to by, for example, the client computer **14***a*. When a call is detected, the client input task **170***a* controls the computer **14***a* to prompt the client to enter a password and an account number. During synchronization, the client input task **170***a* also requests a list of all of the sites stored in that client database **78**, all of the regions stored in that client database, as well as all of the playlists created at that computer **14***a*. This represents a method of passing forward notification of deleted sites, regions or playlists. The client input task **170***a* subsequently requests modified site records from the client computer, and continues to do so until the client computer responds with a null record to indicate that no more modified records exist. Similarly, the client input task **170***a* requests modified region records and modified playlist records from the client computer **14***a*, and does so until null records are received. The client input task **170***a* subsequently reports modified site records, modified region records and modified playlist records to the client application at the computer **14***a*. The client is therefore informed of the site records and region records that have been administratively activated or changed. The reporting transactions continue as long as the modified region and site records remain in the server database **80**. The client is also informed of playlist records that have been transmitted. These reporting transactions continue as long as the modified playlist records remain in the server database **80**. The client input task **170***a* is programmed to then conclude the session with the client computer **14***a* and terminate the connection on the network **16**.

Paging output tasks **172** are protocol processing modules, which accept command packets generated by the server daemon **174** and deliver them to a paging company **30** via a communication link **16** or **17**. The server daemon **174** is preferably a perpetual software processing module which monitors changes made to the server database **80** via client input tasks **170**, determines when and how to update the message playback devices **24** and generates command packets accordingly. For example, when a client creates a new site or region, or makes a change to an existing site or region, one of the client input tasks (e.g., task **170***c*) at the server **12** communicates with the computer **14** (e.g., computer **14***b*) to receive data from that client application. The data is entered, for example, using the screens depicted in FIGS. **20** and **23**. The client input task **170***c* subsequently records these modifications in the server database **80** during the next synchronization process. Depending on the nature of the change requested by the client, the server daemon **174** preferably operates in one of two ways. Since human interaction is preferably required to create new sites and regions in a client database, the tables for the new sites and regions contain an SSTATE field which is set to the parameter corresponding to the "New" state. The client computer (e.g., computer **14***b*) is programmed to retrieve data entered in the fields on the screens (e.g., screen **123**) and to automatically provide it to account, site or region tables as necessary. The client computer **14***b* is also programmed to provide the modified tables to the server **12**, along with playlist root tables **104**, playlist message tables **106** and playlist site tables **108**, during synchronization.

When the server daemon **174** encounters tables with the SSTATE field set to the variable "New", the daemon **174** takes no further action since an administrator at the server **12** processes the data received from the client computers **14** at a later time to set up the necessary server database records. When administrative changes are made by a client to an existing record or table, such as changing telephone numbers or points of contact, the server daemon **174** also takes no further action since such changes have no impact on the communication path to the message playback devices **24**. When the region assignment of a particular site is changed, the server daemon **174** generates and sends a command packet to the message playback device **24** at that site to change the region assignment at that computer.

The primary task of the daemon **174** is preferably to send playlists to remote message playback devices **24** to control the sequence of messages played by, for example, CD players at the various sites **18**, **20** and **22**. Since the transmission method is preferably a one-way data broadcast, the server is programmed to conserve air time. Playlists are most efficiently sent to sites within particular regions. Each packet generated by the paging output tasks **172** comprises a header having bit flags. The bit flags are set to indicate which region numbers have been selected. All of the sites in a region are preferably provided with the same capcode. The flags, therefore, are used as a second level of discrimination. Use of regions assigned with unique identification codes allows a single playlist to be received by every message playback device **24** in a single region, or in a cross-section thereof, or in as many as **16** regions, for example.

As stated previously, the system **10** is configured to allow programming of individual sites and offers advantages such as the ability to play signature tracks at certain sites or regions. The more differences that exist between receiving sites; however, the more air time that is required by the system **10**. The system **10** is therefore configured to optimize air time to manage various situations. For example, several playlists can be scheduled for the same transmission date with some of the playlists specifying sites in the same region. In some instances, playlists can specify only some of the sites in a region and leave other sites unchanged. Finally, track corrections can exist in one or two sites within a region and thereby complicate a regional playlist. These three types of situations can also be combined to determine the optimal strategy for transmitting a set of playlists. The server **12** is programmed to set up two models. First, the server **12** attempts to create one playlist that covers the largest number of sites. The server **12** calculates the total number of data required to transmit the playlist to all the sites in the affected regions and the individually addressed playlists being sent to

sites not intended to play the first playlist. Second, the server 12 calculates the total amount of data required to individually address each site affected by the playlists. The server 12 generates command packets in accordance with the method requiring the least amount of data and forwards the command packets to one of the paging output tasks 172.

As stated previously, the client application at each computer 14 is programmed to generate screens to guide the user in describing relationships between sites, regions, messages and playlists. Activities are subsequently recorded by the client computer 14 in the client database 78 maintained at that computer. The database 78 is subsequently synchronized with the server database 80 at, for example, regular intervals to record changes made by clients at the server database 80. As stated previously, the protocol used for communication between client computers 14 and the server is preferably a customized Data Transaction Protocol (DTP). The DTP is a session-based, end-to-end protocol, which is designed to provide positive acknowledgment upon completion of each transaction. Transactions are preferably initiated by the server 12 regardless of whether they require changes to the server database 80 or to a client database 78. The DTP comprises two layers, that is, an upper layer and a lower layer. The lower layer corresponds approximately to the Data, Link, Network, Transport, Session and Presentation layers specified in the Open System Interconnection (OSI) reference model. The upper layer corresponds approximately to the Application layer of the OSI reference model. The lower level shall be described herein as a custom protocol; however, it can also be implemented as a wrapper for an industry standard protocol such as TCP/IP or IPX/SPX. Client applications and server software modules preferably run in a 32-bit WINDOWS™ environment.

Transaction in DTP between client computers 14 and the server 12 preferably comprise request messages and response messages. The server 12 preferably initiates a transaction with a request message, and the client computer preferably concludes the transaction with a corresponding response message. A request message can, for example, request a client computer 14 to change its database 78 or pass information required for the server 12 to change the server database 80. A response message, for example, reports that a change is complete or returns information from the client database 78 to the server 12. These transactions will be described in further detail below.

As stated previously, the lower layer provides the functionality corresponding to OSI reference model layers 2–6. It is therefore useful for operating with a physical layer comprising a UART 66, a modem 64 and a telephone line provided in each of the client computers 14 since it is a connection-oriented protocol. The lower layer converts request messages or response messages into preferably a single packet. The lower layer, therefore, relies on the upper layer for packet acknowledgment and packetizing. The lower layer notifies the upper layer when it is ready to receive a new message, and subsequently converts new messages into packets by prepending Start Flag, Length and Sequence bits and by calculating and appending a CRC-16 value, as shown in FIG. 30. When the lower layer receives packets, it validates the CRC-16 and checksum values. Packets having an incorrect checksum are ignored, as are packets that have already been processed. Valid packets are passed to the upper layer.

The lower layer operates in one of two modes, depending on whether it is servicing a client computer 14 or the server 12. In the client computer 14, the lower layer initiates a modem 64 call and notifies the upper layer when the first message is received from the server 12. In the server 12, the lower layer places the modem 76 therein in an auto-answer mode and requests the first message from the upper layer when a call from a client computer 14 is detected and a connection with the server 12 is established.

The upper layer operates as part of the client application or the server software (i.e., client input task 170). The upper layer manages communication on a transaction level, generating request messages and response messages as necessary.

A transaction is preferably encoded as an eight-bit function code value, followed by an arbitrary number of encoded, typed fields, as indicated in FIGS. 31–40. As stated previously, a transaction comprises a request message from the server 12 and a response message from a client computer. A number of transaction types can be created for use in the system 10. Exemplary transactions will now be described in connection with FIGS. 31–40.

The log-on transaction validates a session and is intended to be the first transaction after connection between a client computer 14 and the server 12 is established. The server 12 issues a log-on request message. The client computer 14 subsequently responds with a log-on response message, as indicated in FIG. 31. If the response message contains a valid account number and password, the server 12 continues to issue request messages until the session is complete, that is, after site, region and playlist rosters are sent, and site, region and playlist modification requests are sent, as described above. If the response message from the client computer 14 is incorrect, the server 12 preferably terminates the connection. As shown in FIG. 31, one of the fields corresponds to a new password field. If the new password field is not null, then the server 12 accepts the contents as the new password to be used for subsequent sessions on that particular account.

The response portion of a site roster transaction is depicted in FIG. 32. A request message for a list of sites from the server 12 preferably comprises no fields. The client computer 14 sends a complete list of sites in its client database 78 to the server 12. Sites in the server database 80 that are not found in this list are determined to have been removed by the client. Records (e.g., site tables 88) deleted in this manner are provided with flags for administrative attention by changing the SSTATE field to SSDEL which corresponds to a code indicating that a record has been deleted by the client and requires administrative attention. Sites in the client list that are not found in the server database 80 are determined to have been created by the user. The server 12 automatically adds these sites to the server database 80. The response segment of a region roster transaction is depicted in FIG. 33 and involves adding and deleting regions to and from, respectively, the server database 80 in a manner similar to the site roster transaction. A playlist roster transaction is depicted in FIG. 34. This transaction is similar to the playlist and region roster transactions, except that records are deleted from the server database 80, as opposed to being flagged for administrative attention.

With regard to the site modification transaction, the server 12 generates a request message to solicit the next site record in which changes have been made at the client computer 14 to which the server 12 is connected. The client computer 14 in return generates a response message having fields as indicated in FIG. 35. The fields in the corresponding server database record are then updated in accordance with the fields in the site modification response message generated by the client computer. If the NREGKEY field indicates that a

region assignment change is requested, the SSTATE field in the corresponding server database table **88** is changed to SSPEND. If the record is new, the SSTATE field in the corresponding database table **88** is changed to SSNEW; otherwise, the SSTATE field is changed to SSREADY. Similarly, in a region modification transaction, the server **12** generates a request message to solicit the next region record or table at the client computer **14** in which changes have been made. The fields in the corresponding server database table **90** are then updated in accordance with the response message shown in FIG. **36**. If the record is a new one, the SSTATE field in the table **90** is changed to SSNEW; otherwise, the SSTATE field in the table **90** is changed to SSREADY.

In a playlist modification transaction, the server **12** generates a request message to solicit the next playlist record in which changes have been made from the client computer **14** to which it is connected. The fields in the corresponding server database tables **104**, **106** and **108** are updated in accordance with the response message depicted in FIG. **37**. As with the region modification request, a new record is acknowledged by changing the SSTATE field to SSNEW; otherwise, the SSTATE field is changed to SSREADY. Since a playlist is represented by three tables, as described previously, the playlist modification transaction is more complex than the site or region modification transactions. The list of site keys in the response message corresponds to records in the playlist site table **108**. The list of message codes corresponds to the fields in the playlist message tables **106**, with the POS field being derived from the position of each message code in the transaction. Once a playlist has been transmitted to a message playback device (i.e., the SENT field Boolean value corresponding to the state "true")), the record at the message playback device becomes a read-only record that cannot be modified, but rather only replaced.

A site modification transaction involves the server generating a request message as shown in FIG. **38** to notify the client computer **14** of changes made to the site table **88**. The only field effected by this transaction is preferably the SSTATE field since this transaction type is intended to facilitate notifying the client when administrative changes to a site record are complete. Similarly, the server generates a request in the region modification transaction shown in FIG. **39** to notify a client when administrative changes to a region record are complete.

During a playlist modification transaction, the server **12** generates a request message to notify a client of changes made to a playlist in the server database **80**. Client tables are updated by the client computer **14** according to the fields in the request message as shown in FIG. **40**. The SSTATE field in the client table is taken from the SSTATE field in the request message. The transaction informs the client that a playlist has been transmitted. As with the playlist modification request transaction, the site keys correspond to records in the playlist site table **108**. The message codes correspond to records in the playlist message tables **106**, with the POS field being derived from the position of each code in the transaction. In the case where a client attempts to change a playlist after it has been sent to the client computer **14**, but before the client computer **14** has been notified, the server **12** ignores the modification requests and then notifies the client computer **14** of the change.

The protocol for communication between the server **12** and the message playback devices **24** will now be described in connection with FIGS. **41–52**. The message playback generating devices **24** are the end points of the system **10**. As stated previously, each message playback device **24** is a microcomputer-based device designed for installation into the chassis of a compact disc player **32** (CDP), for example. The message playback device is programmable to turn the CDP **32** on and off and to select tracks for repetitive play. The message playback device is preferably operational in a receive-only manner and is programmed to select command packets from the server **12** according to a number of parameters. Each message playback device has a unique identification code, a paging capcode and a region number. The region number can range, for example, from an integer from 0 to 15 in order to identify the region membership of that particular message playback device **24**. The message playback device can receive commands encoded into alphanumeric radiopaging or other non-wireline communication signals; however, the same command structure can be used in wireline communication. The encoding, however, is different for radiopaging to account for a limited character set and the one-way nature of radiopaging. Each radiopaging signal, which is sent from the server **12** through the radiopaging company **30** to the message playback devices **24**, preferably comprises a sequence number, a packet length, an encoded command and a single bit checksum. In addition, each radiopaging signal preferably corresponds to a single packet.

Command blocks are preferably limited such that one command block fits into one packet. The packets preferably use a limited, seven-bit character set for compatibility between several different paging systems. The transmission process is preferably unidirectional with no acknowledgment or other feedback mechanism. The receiver at each message playback device **24** can receive multiple transmissions of the same packet and replace damaged characters in an original packet with characters in subsequent packets having superior quality.

The command block comprises a binary data block of arbitrary length. A six-bit encoding process converts the eight-bit binary data into six-bit words, as shown in FIG. **42**. For compatibility with most processors, the resulting six-bit values are stored as eight-bit values with the zeros inserted into the two most significant bits. The packetizing process then adds a six-bit sequence number, a six-bit length code and a six-bit checksum to the binary data block to create a complete packet containing six-bit words. A character mapping process is then employed which uses a one-to-one map for converting six-bit words into seven-bit characters compatible with a paging network **30**. The complete packet is then passed along with a PIN to a paging output task **172** at the server **12** to send the packet into a paging system **30** as an alphanumeric radiopaging signal. The paging output task **172** preferably uses an industry standard transport protocol such as ixo/TAP, TNPP or SNPP.

The paging company **30** subsequently receives the alphanumeric radiopaging signal, processes it and transmits it, accordingly. Using an industry standard paging format such as POCSAG, FLEX or ERMES, the message playback devices **24** each receive the page and decode the radiopaging signals into the original seven-bit packet, and error condition codes of each character. The seven-bit packet is then unmapped into a six-bit packet. If the six-bit packet contains bit errors which cannot be corrected using the paging format, the microcontroller **50** retains the six-bit packet in a voting buffer (not shown). Subsequent packets received with the same sequence number from the paging company **30** are provided to the voting buffer to replace damaged characters with superior quality characters. Once the buffer contains only undamaged characters, the command block is con-

verted from six-bit words to the original eight-bit data block. The original command block is subsequently processed by the microcontroller **50** to obtain the command from the server **12**.

If wireline communication is employed, the server **12** and the message playback devices **24** are preferably connected using RS-232 lines and operate in an asynchronous mode at 9600 baud or higher with no parity bits and one stop bit. The packets are preferably preceded by a start flag and suffixed by an eight-bit checksum, as shown in FIG. **43**. When a message playback device **24** receives a packet, the packet is checked for errors. If the packet contains errors or is not completely received, the message playback device ignores it; otherwise, the message playback devices act on the command contained therein and issues a response to the server **12**.

Wireline communication is preferably divided into an upper layer corresponding to an OSI Applications layer, and a lower layer corresponding to OSI reference model layers **2** through **6**. At the server **12**, the upper layer is preferably divided into an in-process OLE server and a utility application. At the message playback device, both layers are preferably integrated directly into the microcontroller firmware. The physical layer is preferably RS-232C-based asynchronous communications hardware running at 9600 bites per second.

The command blocks for the message playback devices **24** are depicted in FIGS. **44–52**. In FIG. **44**, a command for program track list by region is depicted. The region mask field in the command is compared with the region programmed into the receiver **52** of the message playback device **24**. If a 0 is found in this field, the command is ignored. If the command packet is accepted, the track numbers are stored in the non-volatile memory **55** of the message playback device and programmed into the controller **40** and compact disc player **32**.

A command for message playlist by electronic serial number (ESN) is depicted in FIG. **45**. The ESN field is compared with the electronic serial number programmed into the receiver **52** of the message playback device **24** receiving the command packet. If a match is found, track numbers are stored and programmed into the compact disc player; otherwise, the command is ignored. The commands for setting the ESN, capcodes and the region number are depicted in FIGS. **46–48**. These numbers are stored into the non-volatile memory **55** of the message playback device **24**.

The format of responses generated by the message playback devices following receipt of command packets are depicted in FIGS. **49–52**. The message playback devices **24** are programmed to send a command complete response to the server **12** to indicate when the last received command was successfully completed, a command ignored response to indicate that the last command was ignored (i.e., because either the ESN or region fields did not match those programmed into the message playback device), an EEPROM write failure response to indicate that the last command could not be completed due to failure to write to the memory **55** and a status report.

The system **10** realizes a number of advantages over existing message delivery systems. The use of CD-ROM technology overcomes the aforementioned problems with endless loop cassette tapes and provides superior sound quality. The screens generated by the client computers **14** allow users to graphically select locations of message playback devices **24** at which selected messages are to be played via a MOH telephone system or other advertising device, as well as subsets or regions containing several message playback devices **24**. The screens also permit users to create playlists by graphically selecting messages from a library of messages available at the message playback devices **24** and the order in which the messages are to be played. The playlists are transmitted to each of the message playback devices preferably via radiopaging or sent via a wireline communication link. Radiopaging is relatively inexpensive and minimizes installation costs (i.e., the message playback devices **24** are merely plugged into an existing power outlet and no further wiring is required). Thus, managers of private and public organizations can use the system **10** to program the information they wish to provide their customers via a MOH telephone system or other audio and/or visual advertising device from a remote location at any time during the day efficiently and cost-effectively.

While certain advantageous embodiments have been chosen to illustrate the invention, it will be understood by those skilled in the art that various changes and modifications can be made herein without departing from the scope of the invention as defined in the appended claims.

What is claimed is:

1. A programmable message delivery system for playing messages on message playback devices at one or more remote sites comprising:

a communication link;

a plurality of message playback devices, each of said message playback devices comprising a storage device for storing messages and for playing selected ones of said messages through an output of said message playback device; and

a computer remotely located from said plurality of message playback devices and operable to generate and transmit control signals via said communication link for controlling at least one of said plurality of message playback devices;

each of said plurality of message playback devices being adapted to receive said control signals via said communication link, said control signals comprising identification data for identifying selected ones of said plurality of message playback devices and list data for identifying selected ones of said messages for playback by respective ones of said selected message playback devices, each of said selected message playback devices being programmable to access said messages identified therefor in said list data from said storage device and to provide said messages to said output until different ones of said messages are selected.

2. A system as claimed in claim **1**, wherein said communication link is selected from the group consisting of a microwave link, a radio frequency link, a satellite link, a public switched telephone network, a private switched telephone network, a digital communications network, the Internet, and a fiber optic network.

3. A system as claimed in claim **1**, wherein said control signals are transmitted to all of said plurality of message playback devices, each of said plurality of message playback devices comprising a receiver circuit for receiving said control signals and a processing device for processing said list data to operate in accordance with said control signals if said identification data corresponds to said message playback device.

4. A system as claimed in claim **3**, wherein each of said plurality of message playback devices not identified in said control signals are operable to disregard said list data.

5. A system as claimed in claim **1**, wherein said message playback device comprises a processing device, a storage

device for storing said messages as respective files, and a receiver adapted to receive said control signals via said communication link, said computer being programmable to generate said control signals comprising commands for said processing device to access at least a selected one of said files to play a corresponding one of said messages through said output.

6. A system as claimed in claim **1**, wherein each of said message playback devices comprises at least one message output apparatus comprising said output and selected from the group consisting of a music on-hold-compatible telephone system, an automated telephone answering system, a public address system, a visual display device, an electronically-controlled sign, an audiovisual apparatus, a videoconferencing device, and a multimedia announcement device.

7. A programmable message delivery system for playing messages on message playback devices at one or more remote sites comprising:

a communication link;

a plurality of message playback devices, each of said message playback devices comprising a storage device for storing messages and for playing selected ones of said messages through an output of said message playback device; and

a computer remotely located from said plurality of message playback devices and operable to generate and transmit control signals via said communication link for controlling at least one of said plurality of message playback devices;

each of said plurality of message playback devices being adapted to receive said control signals via said communication link and being programmable to access at least one of said messages from said storage device and to provide said accessed message to said output in accordance with said control signals;

wherein said computer comprises a display device and is programmable to generate screens on said display device for guiding an operator to make choices selected from the group consisting of which of said messages are to be played, which of said plurality of message playback devices are to play said selected messages, a time of day when said control signals are to be transmitted to said message playback devices, a date on which said control signals are to be transmitted to said message playback devices, a sequence in which said selected messages are to be played, and how many times to repeat at least one of said selected messages in said sequence, and to generate said control signals to implement said choices via said message playback devices.

8. A system as claimed in claim **7**, wherein at least one of said screens displays a location directory comprising a site name for each of said remote sites and guides said operator to select at least one of said remote sites, said computer being programmable to transmit said control signals to said remote sites selected by said operator.

9. A system as claimed in claim **7**, wherein at least one of said screens displays names of regions corresponding to subsets of said remote sites and guides said operator to select at least one of said regions, said computer being programmable to generate control signals addressed to said remote sites in said regions selected by said operator.

10. A system as claimed in claim **9**, wherein said subsets of said remote sites are selected from the group consisting of said remote sites located in contiguous geographical areas, said remote sites located in a plurality of noncontiguous geographical areas, said remote sites offering a similar service, and said remote sites corresponding to a particular client.

11. A system as claimed in claim **7**, wherein at least one of said screens displays at least one of a list of titles and reference codes corresponding to said messages from which said operator can select a plurality of said messages for play at said remote sites, said computer being programmable to generate a playlist comprising data relating to said plurality of messages and to generate said control signals to implement said playlist using said message playback devices.

12. A system as claimed in claim **11**, wherein at least one of said screens comprises a script corresponding to at least one of said messages identified in said at least one of said screens.

13. A system as claimed in claim **11**, wherein one of said screens comprises at least one of a current playlist and a pending playlist for a selected one of said remote sites, said current playlist and said pending playlist each comprising said reference codes corresponding to said selected messages, said pending playlist further comprising a date corresponding to when said pending playlist is to be transmitted to said message playback devices.

14. A system as claimed in claim **11**, wherein said screen also displays a list of names corresponding to said remote sites and guides said operator to select said remote sites at which said messages on said playlist are to be played.

15. A system as claimed in claim **14**, wherein said screen allows said operator to specify at least one of a plurality of parameters selected from the group consisting of a time of day when said control signals are to be transmitted to said message playback devices, a date on which said control signals are to be transmitted to said message playback devices, a sequence in which said selected messages are to be played, and how many times to repeat said selected messages in said sequence at said selected remote sites.

16. A system as claimed in claim **11**, wherein said screen guides said operator to select one of said messages from said playlist and an operation selected from the group consisting of adding at least one of said messages to said playlist, deleting at least one of said messages to said playlist, changing said sequence of said messages on said playlist, and changing at least one of the date or time for playing at least one of said messages.

17. A programmable message delivery system for playing messages at multiple remote sites comprising:

a communication link;

a plurality of message playback devices, each of said message playback devices comprising a storage device for storing messages and for playing selected ones of said messages through an output of said message playback device; and

a first computer for generating and transmitting control signals via said communication link for controlling at least one of said plurality of message playback devices, each of said plurality of message playback devices being adapted to receive said control signals via said communication link;

a plurality of second computers, each of said plurality of second computers being configured to communicate with said first computer and being programmable to generate screens for guiding an operator to make choices selected from the group consisting of which of said messages is to be played, which of said plurality of message playback devices is to play said selected message, which of a number of subsets of said plurality

of message playback devices is to play said selected message, and when said selected message is to commence playing, and to transmit data signals relating to said choices to said first computer, said first computer being programmable to generate said control signals in accordance with said data signals.

18. A system as claimed in claim **17**, wherein each of said plurality of second computers is operable to store data selected from the group consisting of data relating to each of said remote sites associated with said second computer, at least one of identification codes and titles for uniquely identifying each of said messages stored via aid storage device, and message playlists comprising said identification codes of selected ones of said messages for play at said associated remote sites.

19. A system as claimed in claim **18**, wherein said first computer is operable to store said data and each of said plurality of second computers is programmable to send modifications to said data stored therein to said first computer, said first computer being programmable to update said data stored therein and to generate and transmit control signals in accordance with said modifications.

20. A system as claimed in claim **17**, further comprising a third computer for generating and transmitting said control signals via said communication link for controlling at least one of said plurality of message playback devices, at least one of said plurality of message playback devices being adapted to receive said control signals from said third computer via said communication link, at least one of said plurality of second computers being configured to communicate with said third computer in lieu of said first computer.

21. A system as claimed in claim **17**, wherein each of said message playback devices comprises at least one message output apparatus comprising said output and selected from the group consisting of a music on-hold-compatible telephone system, an automated telephone answering system, a public address system, a visual display device, an electronically-controlled sign, an audiovisual apparatus, a videoconferencing device, and a multimedia announcement device.

22. A method of programming message playback devices located at multiple remote sites comprising the steps of:

storing a library of discrete and individually accessible messages at each of said remote sites;

storing at least one of a title and an identification ode for uniquely identifying each said message at a computer located remotely with respect to said message playback devices;

storing site data relating to at least a selected one of said remote sites at said computer;

selecting at least one said message from said library for play at said selected remote site using said computer;

generating a control signal using said computer for said message playback device corresponding to said selected remote site to play said selected message; and

transmitting said control signal to at least said selected remote site.

23. A method as claimed in claim **22**, further comprising the steps of:

receiving said control signal at said selected remote site;

accessing said selected message from said library stored at said selected remote site; and

playing said selected message on said message playback device at said selected remote site.

24. A method as claimed in claim **22**, further comprising the steps of:

defining a subset of said remote sites using a unique region code, said control signal comprising said region code, said transmitting step comprising the step of transmitting said control signal at least to all of said emote sites in said subset;

receiving said control signal at each of said remote sites in said subset;

accessing said selected message from said library stored at said remote sites in said subset; and

playing said selected message on said message playback device at each of said remote sites in said subset.

25. A method as claimed in claim **22**, wherein said messages are stored on at least one optical disc at each of said remote sites and each of said remote sites comprises an optical disc player, said generating step comprising the steps of:

converting said identification code of said selected message into a number for a corresponding track on said optical disc at said selected remote site; and

generating a command for said optical disc player at said selected remote site to advance to said track and play said selected message.

26. A method of programming message playback devices located at multiple remote sites comprising the steps of:

storing a library of discrete and individually accessible messages at each of said remote sites;

storing message data for each said message at a first computer located remotely with respect to said message playback devices;

storing site data relating to at least two selected said remote sites at said first computer;

selecting different sets of said messages from said library using said first computer for play at respective said selected remote sites;

generating control signals for commanding said message playback devices corresponding to said selected remote sites to play respective said sets of messages; and

transmitting said control signals to at least said selected remote sites.

27. A method as claimed in claim **26**, further comprising the steps of:

receiving said control signals at said selected remote sites;

accessing said sets of messages from said library at respective said selected remote sites in accordance with said control signals; and

playing said sets of messages on said message playback devices at respective said selected remote sites.

28. A method of programming message playback devices located at multiple remote sites comprising the steps of:

storing a library of discrete and individually accessible messages at each of said remote sites, each message being uniquely identified by at least one of an identification code and a title;

storing said at least one of said identification code and said title for each said message at a computer located remotely with respect to said message playback devices;

storing site data relating to said remote sites at said computer;

generating at least one computer screen using said computer to display a list of location names corresponding to said remote sites and a list of each said message;

entering playlist data using said at least one computer screen selected from the group consisting of said identification codes of selected ones of said messages, said titles of selected ones of said messages, times for commencing the play of said messages, and selected ones of said remote sites at which said messages are to be played;

generating a control signal using said playlist data; and

transmitting said control signal to said remote sites.

29. A method as claimed in claim **28**, further comprising the steps of:

receiving said control signal at said remote sites;

accessing said selected messages from said library stored at respective said selected remote sites; and

playing said selected messages on said message playback devices at respective said selected remote sites.

30. A programmable message delivery system for playing messages comprising:

a storage device for storing discrete, individually accessible messages;

a processor connected to said storage device and programmable to access at least one of said messages;

an input device connected to said processor;

a display device connected to said processor; and

at least one message output apparatus selected from the group consisting of a music on-hold-compatible telephone system, a public address system, a visual display device, an electronically-controlled sign, an audiovisual apparatus, a videoconferencing device, and a multimedia announcement device, said message output apparatus comprising an input and an output, said processor being programmable to generate at least one screen on said display device to display message data relating to each of said messages, said message data selected from the group consisting of a message titles corresponding to respective ones of said messages, message identification codes corresponding to respective said messages, and text of at least one of said messages, said processor being programmable to allow an operator to select at least one of said messages using said message data and said input devices to access said selected message via said storage device and to provide said selected message to said input of said message output apparatus for play through said output of said message output apparatus.

31. A system as claimed in claim **30**, wherein said operator can select a sequence of said messages, said processor being programmable to access each of said selected messages via said storage device to provide said messages to said input for play on said output in accordance with said sequence.

32. A message playback device for playing selected messages from an optical disc, the message playback device being remotely controllable via a broadcast transmission system and comprising:

an optical disc system for playing at least one optical disc and providing signals generated therefrom to an output;

a first processor being programmed to generate control signals to control operation of said optical disc system;

a receiver unit; and

a second processor connected to said first processor and to said receiver unit, said receiver unit being operable to receive command signals transmitted thereto from said broadcast transmission system and to provide said command signals to said second processor, said command signals identifying selected tracks on said at least one optical disc, said second processor being programmed to convert said command signals into corresponding ones of said control signals to play said selected tracks on said optical disc system and to provide said corresponding ones of said control signals to said first processor until different said tracks on said at least one optical disc are selected.

33. A programmable message delivery system for playing messages on message playback devices at one or more remote sites comprising:

a communication link;

a plurality of message playback devices, each of said message playback devices comprising a storage device for storing messages and for playing selected ones of said messages through an output of said message playback device; and

a computer remotely located from said plurality of message playback devices and operable to generate and transmit control signals via said communication link for controlling at least one of said plurality of message playback devices;

each of said plurality of message playback devices being adapted to receive said control signals via said communication link and being programmable to access at least one of said messages from said storage device and to provide said accessed message to said output in accordance with said control signals;

wherein said message playback device comprises an optical disc player, a processing device, a disc having tracks for storing said messages, and a receiver adapted to receive said control signals via said communication link, said control signals comprising commands for said processing device to control said optical disc player access to at least a selected one of said tracks and play a corresponding one of said messages.

34. A remotely controllable message playback device for playing selected messages from an optical disc comprising:

an optical disc system for playing at least one optical disc and providing signals generated therefrom to an output;

a first processor being programmed to generate control signals to control operation of said optical disc system;

a receiver unit; and

a second processor connected to said first processor and to said receiver unit, said receiver unit being operable to receive command signals transmitted thereto and to provide said command signals to said second processor, said second processor being programmed to convert said command signals into corresponding ones of said control signals and to provide said corresponding ones of said control signals to said first processor;

wherein said command signals are selected from the group consisting of a radio frequency signal and a wireline communication signal.

35. A remotely controllable message playback device as claimed in claim **34**, wherein said command signals are radiopaging signals, said receiver unit being configured to demodulate radiopaging signals and to provide said demodulated signals to said second processor.

36. A remotely controllable message playback device as claimed in claim **34**, wherein said command signals com-

prise at least one of a plurality of datum selected from the group consisting of a track number corresponding to a track on said at least one optical disc that is desired to be played and provided to said output of said optical disc system, an identification code for uniquely identifying said message playback device, a site code for uniquely identifying a site at which said message playback device is located, a region code for uniquely identifying the geographic region in which said message playback device is located, and a radiopaging capcode.

* * * * *

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(12) EX PARTE REEXAMINATION CERTIFICATE (8332nd)

United States Patent (10) **Number: US 5,991,374 C1**
Hazenfield (45) **Certificate Issued: Jun. 21, 2011**

(54) **PROGRAMMABLE MESSAGING SYSTEM FOR CONTROLLING PLAYBACK OF MESSAGES ON REMOTE MUSIC ON-HOLD-COMPATIBLE TELEPHONE SYSTEMS AND OTHER MESSAGE OUTPUT DEVICES**

(75) Inventor: **Joey C. Hazenfield**, Cincinnati, OH (US)

(73) Assignee: **Info-Hold, Inc.**, Cincinnati, OH (US)

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(58) **Field of Classification Search** .... None
See application file for complete search history.

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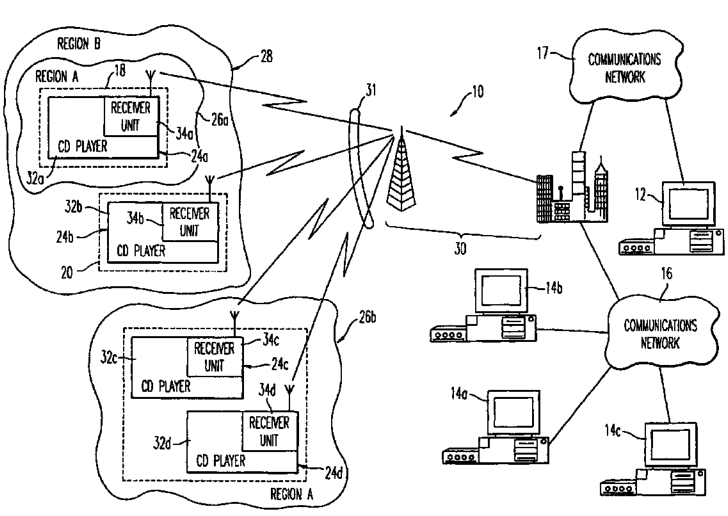
Primary Examiner—Roland G Foster

(57) **ABSTRACT**

A remotely programmable message delivery system comprises a number of client computers which communicate with a server to send control signals to one or more remote message playback devices. The message playback devices are each provided with a library of messages, and comprise at least one music on-hold-compatible telephone system, a public address system or other audio and/or visual advertising device. Message playlists from the client computers can be sent via the server to the message playback devices by a communication link such as a radiopaging system. The client computer is programmed to generate screens for guiding an operator to select messages from the library of messages and the order and times at which they are to be played by selected message playback devices. Message playback devices can be organized into one or more regions to allow a message playlist to be sent to more than one message playback device using a single radiopaging signal. The client computer can also generate screens to display the text of selected messages.



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EX PARTE REEXAMINATION CERTIFICATE ISSUED UNDER 35 U.S.C. 307

THE PATENT IS HEREBY AMENDED AS INDICATED BELOW.

Matter enclosed in heavy brackets [ ] appeared in the patent, but has been deleted and is no longer a part of the patent; matter printed in italics indicates additions made to the patent.

AS A RESULT OF REEXAMINATION, IT HAS BEEN DETERMINED THAT:

Claims **1**, **2** and **5** are cancelled.

Claims **7**, **13**, **17**, **19**, **22-28**, **30** and **32-35** are determined to be patentable as amended.

Claims **8-12**, **14-16**, **18**, **20**, **21**, **29**, **31** and **36**, dependent on an amended claim, are determined to be patentable.

New claims **37-39** are added and determined to be patentable.

Claims **3**, **4** and **6** were not reexamined.

7. A programmable message delivery system for playing messages on message playback devices at one or more remote sites comprising:

a communication link;

a plurality of message playback devices, each of said message playback devices *communicating with a respective telephone system and* comprising a storage device for storing messages and for playing selected ones of said messages through an output of said message playback device *when a caller is placed on hold*; and

a computer remotely located from said plurality of message playback devices and operable to generate and transmit control signals via said communication link for controlling at least one of said plurality of message playback devices;

each of said plurality of message playback devices being adapted to receive said control signals via said communication link and being programmable to access at least one of said messages from said storage device and to provide said accessed message to said output in accordance with said control signals *when a caller is placed on hold*;

wherein said computer comprises a display device and is programmable to generate screens on said display device **[**for**]** *that include user selectable menu items for selection by an operator to define relationships between said plurality of message playback devices and said messages, the screens* guiding an operator to make choices selected from the group consisting of which of said messages are to be played, which of said plurality of message playback devices are to play said selected messages, a time of day when said control signals are to be transmitted to said message playback devices, a date on which said control signals are to be transmitted to said message playback devices, a sequence in which said selected messages are to be played, and how many times to repeat at least one of said selected messages in said sequence, and to generate said control signals to implement said choices via said message playback devices.

13. **[**A system as claimed in claim **11**,**]** *A programmable message delivery system for playing messages on message playback devices at one or more remote sites comprising:*

a communication link;

a plurality of message playback devices, each of said message playback devices comprising a storage device for storing messages and for playing selected ones of said messages through an output of said message playback device; and

a computer remotely located from said plurality of message playback devices and operable to generate and transmit control signals via said communication link for controlling at least one of said plurality of message playback devices;

each of said plurality of message playback devices being adapted to receive said control signals via said communication link and being programmable to access at least one of said messages from said storage device and to provide said accessed message to said output in accordance with said control signals;

wherein said computer comprises a display device and is programmable to generate screens on said display device for guiding an operator to make choices selected from the group consisting of which of said messages are to be played, which of said plurality of message playback devices are to play said selected messages, a time of day when said control signals are to be transmitted to said message playback devices, a date on which said control signals are to be transmitted to said message playback devices, a sequence in which said selected messages are to be played, and how many times to repeat at least one of said selected messages in said sequence, and to generate said control signals to implement said choices via said message playback devices;

wherein at least one of said screens displays at least one of a list of titles and reference codes corresponding to said messages from which said operator can select a plurality of said messages for play at said remote sites, said computer being programmable to generate a playlist comprising data relating to said plurality of messages and to generate said control signals to implement said playlist using said message playback devices; and

wherein one of said screens comprises at least one of a current playlist and a pending playlist for a selected one of said remote sites, said current playlist and said pending playlist each comprising said reference codes corresponding to said selected messages, said pending playlist further comprising a date corresponding to when said pending playlist is to be transmitted to said message playback devices.

17. A programmable message delivery system for playing messages at multiple remote sites comprising:

a communication link;

a plurality of message playback devices, each of said message playback devices *communicating with a respective telephone system and* comprising a storage device for storing messages and for playing selected ones of said messages through an output of said message playback device *when a caller is placed on hold*; **[**and**]**

a first computer for generating and transmitting control signals via said commuication link for controlling at least one of said plurality of message playback devices, each of said plurality of message playback devices being adapted to receive said control signals via said communication link; *and*

a plurality of second computers, each of said plurality of second computers being configured to communicate with said first computer and being programmable to generate screens [for] *that include user selectable menu items for selection by an operator to define relationships between said plurality of message playback devices and said messages, the screens* guiding an operator to make choices selected from the group consisting of which of said messages is to be played, which of said plurality of message playback devices is to play said selected message, which of a number of subsets of said plurality of message playback devices is to play said selected message, and when said selected message is to commence playing, and to transmit data signals relating to said choices to said first computer, said first computer being programmable to generate said control signals in accordance with said data signals.

19. [A system as claimed in claim **18**,] *A programmable message delivery system for playing messages at multiple remote sites comprising:*

a communication link;

a plurality of message playback devices, each of said message playback devices comprising a storage device for storing messages and for playing selected ones of said messages through an output of said message playback device;

a first computer for generating said transmitting control signals via said communication link for controlling at least one of said plurality of message playback devices, each of said plurality of message playback devices being adapted to receive said control signals via said communication link; and

a plurality of second computers, each of said plurality of second computers being configured to communicate with said first computer and being programmable to generate screens for guiding an operator to make choices selected from the group consisting of which of said messages is to be played, which of said plurality of message playback devices is to play said selected message, which of a number of subsets of said plurality of message playback devices is to play said selected message, and when said selected message is to commence playing, and to transmit data signals relating to said choices to said first computer, said first computer being programmable to generate said control signals in accordance with said data signals;

wherein each of said plurality of second computers is operable to store data selected from the group consisting of data relating to each of said remote sites associated with said second computer, at least one of identification codes and titles for uniquely identifying each of said messages stored via aid storage device, and message playlists comprising said identification codes of selected ones of said messages for play at said associated remote sites; and

wherein said first computer is operable to store said data and each of said plurality of second computers is programmable to send modifications to said data stored therein to said first computer, said first computer being programmable to update said data stored therein and to generate and transmit control signals in accordance with said modifications.

22. A method of programming message playback devices located at multiple remote sites *and communicating with respective telephone systems, the method* comprising the steps of:

storing a library of discrete and individually accessible messages at each of said remote sites;

storing at least one of a title and an identification [ode] *code* for uniquely identifying each said message at a computer located remotely with respect to said message playback devices;

storing site data relating to at least a selected one of said remote sites at said computer;

selecting at least one said message from said library for play at said selected remote site using said computer;

generating a control signal using said computer for said message playback device corresponding to said selected remote site to play said selected message *when a caller is placed on hold on the respective telephone system*; and

transmitting said control signal to at least said selected remote site.

23. A method as claimed in claim **22**, further comprising the steps of:

receiving said control signal at said selected remote site;

accessing said selected message from said library stored at said selected remote site; and

playing said selected message on said message playback device at said selected remote site *when a caller is placed on hold*.

24. [A method as claimed in claim **22**, further comprising the steps of:] *A method of programming message playback devices located at multiple remote sites, comprising the steps of:*

storing a library of discrete and individually accessible messages at each of said remote sites;

storing at least one of a title and an identification code for uniquely identifying each said message at a computer located remotely with respect to said message playback devices;

storing site data relating to at least a selected one of said remote sites at said computer;

selecting at least one said message from said library for play at said selected remote site using said computer;

generating a control signal using said computer for said message playback device corresponding to said selected remote site to play said selected message; and transmitting said control signal to at least said selected remote site;

defining a subset of said remote sites using a unique region code, said control signal comprising said region code, said transmitting step comprising the step of transmitting said control signal at least to all of said [emote] *remote* sites in said subset;

receiving said control signal at each of said remote sites in said subset;

accessing said selected message from said library stored at said remote sites in said subset; and

playing said selected message on said message playback device at each of said remote sites in said subset.

25. [A method as claimed in claim **22**,] *A method of programming message playback devices located at multiple remote sites, comprising the steps of:*

storing a library of discrete and individually accessible messages at each of said remote sites;

storing at least one of a title and an identification code for uniquely identifying each said message at a computer located remotely with respect to said message playback devices;

storing site data relating to at least a selected one of said remote sites at said computer;

selecting at least one said message from said library for play at said selected remote site using said computer; and

generating a control signal using said computer for said message playback device corresponding to said selected remote site to play said selected message; and transmitting said control signal to at least said selected remote site;

wherein said messages are stored on at least one optical disc at each of said remote sites and each of said remote sites comprises an optical disc player, said generating step comprising the steps of:

converting said identification code of said selected message into a number for a corresponding track on said optical disc at said selected remote site; and

generating a command for said optical disc player at said selected remote site to advance to said track and play said selected message.

26. A method of programming message playback devices located at multiple remote sites *and communicating with respective telephone systems, the method* comprising the steps of:

storing a library of discrete and individually accessible messages at each of said remote sites;

storing message data for each said message at a first computer located remotely with respect to said message playback devices;

storing site data relating to at least two selected said remote sites at said first computer;

selecting different sets of said messages from said library using said first computer for play at respective said selected remote sites;

generating control signals for commanding said message playback devices corresponding to said selected remote sites to play respective said sets of messages *when callers are placed on hold on the respective telephone systems*; and

transmitting said control signals to at least said selected remote sites.

27. A method as claimed in claim **26**, further comprising the steps of:

receiving said control signals at said selected remote sites;

accessing said sets of messages from said library at respective said selected remote sites in accordance with said control signals; and

playing said sets of messages on said message playback devices at respective said selected remote sites *when callers are placed on hold*.

28. A method of programming message playback devices located at multiple remote sites *and communicating with respective telephone systems, the method* comprising the steps of:

storing a library of discrete and individually accessible messages at each of said remote sites *for playback on the respective message playback device when a caller is placed on hold*, each message being uniquely identified by at least one of an identification code and a title;

storing said at least one of said identification code and said title for each said message at a computer located remotely with respect to said message playback devices;

storing site data relating to said remote sites at said computer;

generating at least one computer screen using said computer to display a list of location names corresponding to said remote sites and a list of each said message;

entering playlist data using said at least one computer screen selected from the group consisting of said identification codes of selected ones of said messages, said titles of selected ones of said messages, times for commencing the play of said messages, and selected ones of said remote sites at which said messages are to be played;

generating a control signal using said playlist data; and

transmitting said control signal to said remote sites.

30. A programmable message delivery system for playing messages comprising:

a storage device for storing discrete, individually accessible messages;

a processor connected to said storage device and programmable to access at least one of said messages;

an input device connected to said processor;

a display device connected to said processor; and

at least one message output apparatus selected from the group consisting of a music on-hold-compatible telephone system, a public address system, a visual display device, an electronically-controlled sign, an audiovisual apparatus, a videoconferencing device, and a multimedia announcement device, said message output apparatus comprising an input and an output, said processor being programmable to generate at least one screen on said display device to display message data relating to each of said messages, said message data selected from the group consisting of a message titles corresponding to respective ones of said messages, message identification codes corresponding to respective said messages, and text of at least one of said messages, said processor being programmable to allow an operator to select at least one of said messages using said message data and said input devices to access said selected message via said storage device and to provide said selected message to said input of said message output apparatus for play through said output of said message output apparatus *when a caller is placed on hold*.

32. A message playback device for playing selected messages from an optical disc, the message playback device being remotely controllable via a broadcast transmission system and comprising:

an optical disc system for playing at least one optical disc and providing signals generated therefrom to an output *in communication with a telephone system*;

a first processor being programmed to generate control signals to control operation of said optical disc system;

a receiver unit; and

a second processor connected to said first processor and to said receiver unit, said receiver unit being operable to receive command signals transmitted thereto from said broadcast transmission system and to provide said command signals to said second processor, said command signals identifying selected tracks on said at least one optical disc, said second processor being programmed to convert said command signals into corresponding ones of said control signals to play said selected tracks on said optical disc system *when a caller is placed on hold on the telephone system* and to provide said corresponding ones of said control signals to said first processor until different said tracks on said at least one optical disc are selected.

33. A programmable message delivery system for playing messages on message playback devices at one or more remote sites *and communicating with one or more respective telephone systems, the message delivery system* comprising:

a communication link;

a plurality of message playback devices, each of said message playback devices comprising a storage device for storing messages and for playing selected ones of said messages through an output of said message playback device *when callers are placed on hold on the respective telephone systems*; and

a computer remotely located from said plurality of message playback devices and operable to generate and transmit control signals via said communication link for controlling at least one of said plurality of message playback devices;

each of said plurality of message playback devices being adapted to receive said control signals via said communication link and being programmable to access at least one of said messages from said storage device and to provide said accessed message to said output in accordance with said control signals;

wherein said message playback device comprises an optical disc player, a processing device, a disc having tracks for storing said messages, and a receiver adapted to receive said control signals via said communication link, said control signals comprising commands for said processing device to control said optical disc play access to at least a selected one of said tracks and play a corresponding one of said messages *when the caller is placed on hold.*

34. A remotely controllable message playback device for playing selected messages from an optical disc *when callers are placed on hold, the device* comprising:

an optical disc system *communicating with a telephone system* for playing at least one optical disc and providing signals generated therefrom to an output *when a caller is placed on hold;*

a first processor being programmed to generate control signals to control operation of said optical disc system;

a receiver unit; and

a second processor connected to said first processor and to said receiver unit, said receiver unit being operable to receive command signals transmitted thereto and to provide said command signals to said second processor, said second processor being programmed to convert said command signals into corresponding ones of said control signals and to provide said corresponding ones of said control signals to said first processor;

wherein said command signals are selected from the group consisting of a radio frequency signal and a wireline communication signal.

35. A remotely controllable message playback device [as claimed in claim 34,] *for playing selected messages from an optical disc comprising:*

an optical disc system for playing at least one optical disc and providing signals generated therefrom to an output;

a first processor being programmed to generate control signals to control operation of said optical disc system;

a receiver unit; and

a second processor connected to said first processor and to said receiver unit, said receiver unit being operable to receive command signals transmitted thereto and to provide said command signals to said second processor, said second processor being programmed to convert said command signals into corresponding ones of said control signals and to provide said corresponding ones of said control signals to said first processor;

wherein said command signals are radiopaging signals, said receiver unit being configured to demodulate radiopaging signals and to provide said demodulated signals to said processor.

37. A programmable message delivery system for playing messages on message playback devices at one or more remote sites comprising:

a communication link;

a plurality of message playback devices communicating with respective telephone systems, each of said message playback devices comprising a storage device for storing messages and for playing selected ones of said messages through an output of said message playback device; and

a computer remotely located from said plurality of message playback devices and operable to generate and transmit control signals via said communication link for controlling at least one of said plurality of message playback devices;

each of said plurality of message playback devices being adapted to receive said control signals via said communication link, said control signals comprising identification data for identifying selected ones of said plurality of message playback devices and list data for identifying selected ones of said messages for playback by respective ones of said selected message playback devices when a caller is placed on hold on the respective telephone system, each of said selected message playback devices being programmable to access said messages identified therefor in said list data from said storage device and to provide said messages to said output until different ones of said messages are selected.

38. A system as claimed in claim 37, wherein said communication link is selected from the group consisting of a microwave link, a radio frequency link, a satellite link, a public switched telephone network, a private switched telephone network, a digital communications network, the Internet, and a fiber optic network.

39. A system as claimed in claim 37, wherein said message playback device comprises a processing device, a storage device for storing said messages as respective files, and a receiver adapted to receive said control signals via said communication link, said computer being programmable to generate said control signals comprising commands for said processing device to access at least a selected one of said files to play a corresponding one of said messages through said output.

* * * * *

claim to a composition of matter is held invalid and that claim was the basis of a determination of nonobviousness under section 103(b)(1), the process shall no longer be considered nonobvious solely on the basis of section 103(b)(1).''

1992—Third par. Pub. L. 102–572 substituted ''United States Court of Federal Claims'' for ''United States Claims Court''.

1984—Pub. L. 98–417 inserted provision at end that the invalidity of the extension of a patent term or any portion thereof under section 156 of this title because of the material failure by the applicant for the extension, or by the Commissioner, to comply with the requirements of such section shall be a defense in any action involving the infringement of a patent during the period of the extension of its term and shall be pleaded, and that a due diligence determination under section 156(d)(2) is not subject to review in such an action.

1982—Third par. Pub. L. 97–164 substituted ''Claims Court'' for ''Court of Claims''.

1975—First par. Pub. L. 94–131 made presumption of validity applicable to claim of a patent in multiple dependent form and multiple dependent claims and substituted ''asserting such invalidity'' for ''asserting it''.

1965—Pub. L. 89–83 required each claim of a patent (whether in independent or dependent form) to be presumed valid independently of the validity of other claims and required dependent claims to be presumed valid even though dependent upon an invalid claim.

EFFECTIVE DATE OF 2011 AMENDMENT

Amendment by section 15(a) of Pub. L. 112–29 effective on Sept. 16, 2011, and applicable to proceedings commenced on or after that date, see section 15(c) of Pub. L. 112–29, set out as a note under section 119 of this title.

Amendment by section 20(g), (j) of Pub. L. 112–29 effective upon the expiration of the 1-year period beginning on Sept. 16, 2011, and applicable to proceedings commenced on or after that effective date, see section 20(*l*) of Pub. L. 112–29, set out as a note under section 2 of this title.

EFFECTIVE DATE OF 1999 AMENDMENT

Amendment by section 1000(a)(9) [title IV, § 4402(b)(1)] of Pub. L. 106–113 effective on date that is 6 months after Nov. 29, 1999, and, except for design patent application filed under chapter 16 of this title, applicable to any application filed on or after such date, see section 1000(a)(9) [title IV, § 4405(a)] of Pub. L. 106–113, set out as a note under section 154 of this title.

Amendment by section 1000(a)(9) [title IV, § 4732(a)(10)(A)] of Pub. L. 106–113 effective 4 months after Nov. 29, 1999, see section 1000(a)(9) [title IV, § 4731] of Pub. L. 106–113, set out as a note under section 1 of this title.

EFFECTIVE DATE OF 1992 AMENDMENT

Amendment by Pub. L. 102–572 effective Oct. 29, 1992, see section 911 of Pub. L. 102–572, set out as a note under section 171 of Title 28, Judiciary and Judicial Procedure.

EFFECTIVE DATE OF 1982 AMENDMENT

Amendment by Pub. L. 97–164 effective Oct. 1, 1982, see section 402 of Pub. L. 97–164, set out as a note under section 171 of Title 28, Judiciary and Judicial Procedure.

EFFECTIVE DATE OF 1975 AMENDMENT

Amendment by Pub. L. 94–131 effective Jan. 24, 1978, and applicable on and after that date to patent applications filed in the United States and to international applications, where applicable, see section 11 of Pub. L. 94–131, set out as an Effective Date note under section 351 of this title.

EFFECTIVE DATE OF 1965 AMENDMENT

Amendment by Pub. L. 89–83 effective 3 months after July 24, 1965, see section 7(a) of Pub. L. 89–83, set out as a note under section 41 of this title.

§ 283. Injunction

The several courts having jurisdiction of cases under this title may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable.

(July 19, 1952, ch. 950, 66 Stat. 812.)

HISTORICAL AND REVISION NOTES

Based on Title 35, U.S.C., 1946 ed., § 70, part (R.S. 4921, amended (1) Mar. 3, 1897, ch. 391, § 6, 29 Stat. 694, (2) Feb. 18, 1922, ch. 58, § 8, 42 Stat. 392, (3) Aug. 1, 1946, ch. 726, § 1, 60 Stat. 778).

This section is the same as the provision which opens R.S. 4921 with minor changes in language.

§ 284. Damages

Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.

When the damages are not found by a jury, the court shall assess them. In either event the court may increase the damages up to three times the amount found or assessed. Increased damages under this paragraph shall not apply to provisional rights under section 154(d) of this title.

The court may receive expert testimony as an aid to the determination of damages or of what royalty would be reasonable under the circumstances.

(July 19, 1952, ch. 950, 66 Stat. 813; Pub. L. 106–113, div. B, § 1000(a)(9) [title IV, § 4507(9)], Nov. 29, 1999, 113 Stat. 1536, 1501A–566; Pub. L. 112–29, § 20(j), Sept. 16, 2011, 125 Stat. 335.)

AMENDMENT OF SECTION

Pub. L. 112–29, § 20(j), (l), Sept. 16, 2011, 125 Stat. 335, provided that, effective upon the expiration of the 1-year period beginning on Sept. 16, 2011, and applicable to proceedings commenced on or after that effective date, this section is amended by striking ''of this title'' each place that term appears. See 2011 Amendment note below.

HISTORICAL AND REVISION NOTES

Based on Title 35, U.S.C., 1946 ed., §§ 67 and 70, part (R.S. 4919; R.S. 4921, amended (1) Mar. 3, 1897, ch. 391, § 6, 29 Stat. 694, (2) Feb. 18, 1922, ch. 58, § 8, 42 Stat. 392, (3) Aug. 1, 1946, ch. 726, § 1, 60 Stat. 778).

This section consolidates the provisions relating to damages in R.S. 4919 and 4921, with some changes in language.

AMENDMENTS

2011—Second par. Pub. L. 112–29 struck out ''of this title'' after ''154(d)''.

1999—Second par. Pub. L. 106–113 inserted at end ''Increased damages under this paragraph shall not apply to provisional rights under section 154(d) of this title.''

EFFECTIVE DATE OF 2011 AMENDMENT

Amendment by Pub. L. 112–29 effective upon the expiration of the 1-year period beginning on Sept. 16, 2011, and applicable to proceedings commenced on or after that effective date, see section 20(*l*) of Pub. L. 112–29, set out as a note under section 2 of this title.

EFFECTIVE DATE OF 1999 AMENDMENT

Amendment by Pub. L. 106–113 effective Nov. 29, 2000, and applicable only to applications (including international applications designating the United States) filed on or after that date, see section 1000(a)(9) [title IV, §4508] of Pub. L. 106–113, as amended, set out as a note under section 10 of this title.

§ 285. Attorney fees

The court in exceptional cases may award reasonable attorney fees to the prevailing party.

(July 19, 1952, ch. 950, 66 Stat. 813.)

HISTORICAL AND REVISION NOTES

Based on Title 35, U.S.C., 1946 ed., §70, part (R.S. 4921, amended (1) Mar. 3, 1897, ch. 391, §6, 29 Stat. 694, (2) Feb. 18, 1922, ch. 58, §8, 42 Stat. 392, (3) Aug. 1, 1946, ch. 726, §1, 60 Stat. 778).

This section is substantially the same as the corresponding provision in R.S. 4921; ''in exceptional cases'' has been added as expressing the intention of the present statute as shown by its legislative history and as interpreted by the courts.

§ 286. Time limitation on damages

Except as otherwise provided by law, no recovery shall be had for any infringement committed more than six years prior to the filing of the complaint or counterclaim for infringement in the action.

In the case of claims against the United States Government for use of a patented invention, the period before bringing suit, up to six years, between the date of receipt of a written claim for compensation by the department or agency of the Government having authority to settle such claim, and the date of mailing by the Government of a notice to the claimant that his claim has been denied shall not be counted as part of the period referred to in the preceding paragraph.

(July 19, 1952, ch. 950, 66 Stat. 813.)

HISTORICAL AND REVISION NOTES

Based on Title 35, U.S.C., 1946 ed., §70, part (R.S. 4921, amended (1) Mar. 3, 1897, ch. 391, §6, 29 Stat. 694, (2) Feb. 18, 1922, ch. 58, §8, 42 Stat. 392, (3) Aug. 1, 1946, ch. 726, §1, 60 Stat. 778).

The first paragraph is the same as the provision in R.S. 4921 with minor changes in language, with the added provision relating to the date for counterclaims for infringement.

The second paragraph is new and relates to extending the period of limitations with respect to suits in the Court of Claims in certain instances when administrative consideration is pending.

§ 287. Limitation on damages and other remedies; marking and notice

(a) Patentees, and persons making, offering for sale, or selling within the United States any patented article for or under them, or importing any patented article into the United States, may give notice to the public that the same is patented, either by fixing thereon the word ''patent'' or the abbreviation ''pat.'', together with the number of the patent, or by fixing thereon the word ''patent'' or the abbreviation ''pat.'' together with an address of a posting on the Internet, accessible to the public without charge for accessing the address, that associates the patented article with the number of the patent, or when, from the character of the article, this can not be done, by fixing to it, or to the package wherein one or more of them is contained, a label containing a like notice. In the event of failure so to mark, no damages shall be recovered by the patentee in any action for infringement, except on proof that the infringer was notified of the infringement and continued to infringe thereafter, in which event damages may be recovered only for infringement occurring after such notice. Filing of an action for infringement shall constitute such notice.

(b)(1) An infringer under section 271(g) shall be subject to all the provisions of this title relating to damages and injunctions except to the extent those remedies are modified by this subsection or section 9006 of the Process Patent Amendments Act of 1988. The modifications of remedies provided in this subsection shall not be available to any person who—

(A) practiced the patented process;

(B) owns or controls, or is owned or controlled by, the person who practiced the patented process; or

(C) had knowledge before the infringement that a patented process was used to make the product the importation, use, offer for sale, or sale of which constitutes the infringement.

(2) No remedies for infringement under section 271(g) of this title shall be available with respect to any product in the possession of, or in transit to, the person subject to liability under such section before that person had notice of infringement with respect to that product. The person subject to liability shall bear the burden of proving any such possession or transit.

(3)(A) In making a determination with respect to the remedy in an action brought for infringement under section 271(g), the court shall consider—

(i) the good faith demonstrated by the defendant with respect to a request for disclosure,

(ii) the good faith demonstrated by the plaintiff with respect to a request for disclosure, and

(iii) the need to restore the exclusive rights secured by the patent.

(B) For purposes of subparagraph (A), the following are evidence of good faith:

(i) a request for disclosure made by the defendant;

(ii) a response within a reasonable time by the person receiving the request for disclosure; and

(iii) the submission of the response by the defendant to the manufacturer, or if the manufacturer is not known, to the supplier, of the product to be purchased by the defendant, together with a request for a written statement that the process claimed in any patent disclosed in the response is not used to produce such product.

The failure to perform any acts described in the preceding sentence is evidence of absence of good faith unless there are mitigating circumstances. Mitigating circumstances include the case in which, due to the nature of the product, the number of sources for the product, or like commercial circumstances, a request for disclo-

CERTIFICATE OF FILING AND SERVICE

I hereby certify that, on this the 4th day of March, 2014, I electronically filed the foregoing Non-Confidential Brief of Appellant with the Clerk of Court using the CM/ECF System, which will send notice of such filing to the following registered users:

Barry E. Bretschneider
Michael E. Anderson
Bridget S. Merritt
Baker & Hostetler LLP
1050 Connecticut Avenue, N.W.
Washington Square
Washington, DC 20036

Kevin W. Kirsch
Baker & Hostetler LLP
Suite 3200
312 Walnut Street
Cincinnati, OH 45202-3957

Counsel for Appellee

I further certify that, upon acceptance and request from the Court, the required paper copies of the foregoing will be deposited with United Parcel Service for delivery to the Clerk, UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT, 717 Madison Place, N.W., Washington, D.C. 20439.

/s/ James L. Kwak
James L. Kwak
An Attorney for Plaintiff-Appellant
Info-Hold, Inc.

CERTIFICATE OF COMPLIANCE
With Type-Volume Limitation, Typeface Requirements,
And Type Style Requirements

1. This brief complies with the type-volume limitation of Fed. R. App. P. 32(a)(7)(B) because:

   this brief contains 13,995 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii).

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March 4, 2014

/s/ James L. Kwak
James L. Kwak